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Simplification of Holding Companies
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Homestead Tax Exemption
ALONZO B. MAY

Municipal Plant Contributions and Utility Taxes
ARTHUR BORAK

Fire Insurance for Forests
H. B. SHEPARD

Contract Motor Carrier Regulation
JOHN J. GEORGE

Excess Condemnation for Land Planning
JEWELL CASS PHILLIPS

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It is interesting to turn back the pages of the years and read the record of a business. . . . For time has a way of testing purposes and policies. Good years and lean reveal the character of men and organizations. . . . The fundamental policy of the Bell System is not of recent birth—it has been the corner-stone of the institution for many years. On October 20, 1927, it was reaffirmed in these words by Walter S. Gifford, President, American Telephone and Telegraph Company.

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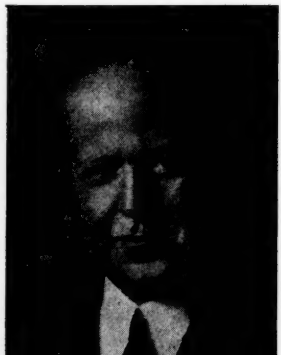

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"Earnings must be sufficient to assure the best possible telephone service at all times and to assure the continued financial integrity of the business. Earnings that are less than adequate must result in telephone service that is something less than the best possible.

"Earnings in excess of these requirements must either be spent for the enlargement and improvement of the service furnished or the rates charged for the service must be reduced. This is fundamental in the policy of the management.

"With your sympathetic understanding we shall continue to go forward, providing a telephone service for the nation more and more free from imperfections, errors or delays, and always at a cost as low as is consistent with financial safety."

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Fire Insurance for Forests

By H. B. SHEPARD*

THE history of forests in America is one of exploitation and depletion of a great natural resource and the conversion of forest capital to other forms. Up to a certain point these policies conformed to the best public interest, since in many places forests occupied land better suited to agriculture, and there was great need for cheap lumber in the building of a new country. But it is generally agreed that such policies have outlived their usefulness and are threatening to become a handicap to needed advances.

The most urgent immediate need is for improved management of the nation's forest lands, the major portion of which appear destined to remain indefinitely in private ownership. Foresters hope for a condition under which forests will be regarded as desirable long-time, income-producing investments. This involves the adoption by private owners of the policy of permanent maintenance of forest capital known as "sustained yield." Obviously, such methods of management are incompatible with the present widespread policy of liquidation. This destructive practice has been the result, in large part, of fear of loss by fire. Availability of effective and economic fire insurance for forest properties would go a long way toward abolishing this fear and thus hasten the adoption of desirable cutting policies.

Forests have not had a good reputation in fire insurance circles. Insurance for forest properties has been offered only reluctantly, as an accommodation, and at rates beyond the reach of forest owners, earning capacities of the properties considered. This lack of insurance facilities has contributed to the desire of owners to liquidate their equities in forest properties, and to a sense of insecurity that is inimical to desirable management practices.

It has long been recognized that as the risk of fire loss could be abated, stability of forest ownership would increase. This recognition has resulted, within the current century, in a remarkable development of organized forest

* Senior Forest Economist, Northeastern Forest Experiment Station, United States Forest Service.

fire protection in a large part of the country. But protection, of course, like all efforts, reaches somewhere its point of diminishing returns. The widespread use of fire insurance for property in general is conclusive evidence that fire protection is not able to go far enough to eliminate the element of economic risk of fire loss. This principle undoubtedly applies also to forest properties.

Several studies of economic factors affecting forests are being carried on by the Forest Service of the Department of Agriculture. Among these is an inquiry into forest fire losses and insurance underwriting requirements, made under provision of the Clarke-McNary Act of July 7, 1924. Because by far the larger portion of privately owned timber is in the Pacific Coast States and economic strains have been especially heavy there, it seemed that insurance might make a truly important contribution in that portion of the country, and it was therefore selected for the initial phase of the inquiry. Findings of the study in that region have recently been published.[1]

The study was directed first toward determining whether some combination of forest protection and fire insurance might make it feasible to shift from the liquidation to the sustained method of forest management. There is strong evidence that protection alone could not take care of the fire risk discount which might make capital shrinkage too great if such a radical change of policy were adopted.

The conclusion of the inquiry on the Pacific Coast is, in brief, that forest fire insurance in that region is feasible and will be profitable if proper underwriting precautions are observed. The normal loss expectation from ordinary fires is found to be 0.082% per year, but it is recommended that commercial insurance be based on an average premium rate of 0.450%. This spread between loss expectation and premium level is deemed essential to cover a number of factors which the insurance carriers could not afford to overlook, despite the strong inducement to good volume of business of a low premium rate.

For example, the 0.082% loss rate quoted above is the average for all privately owned, state, county, and municipal forests in the region, the national forests and Indian lands being excepted. It would not be necessary to insure all this property. For a number of reasons, not all of it could ever be insured, by one carrying organization at least. The mathematical principle of the probable departure of the part from the normal for the whole must therefore be reckoned with. The accumulation of the required major conflagration reserve, the cost of operation, and the need for ordinary safeguard against contingencies also have to be taken into account.

The average premium rate of 45 cents per $100 is suggested in the expectation that the volume of business could be quickly built up to produce an annual premium income of $150,000. With good underwriting, this volume of business would promise success to a carrying organization at the rate level proposed. A premium income of more than $300,000, with a good classification and spread, could be expected to justify lower rates. A really large volume of business, producing, say, a premium income of upwards of $1,000,000 a year might eventually call for an average rate level as low as 25 cents. This will depend, of course, on actual experience over a period of years.

[1] Shepard, H. B., "Forest Fire Insurance in the Pacific Coast States," *U. S. Dept. Agr. Tech. Bull.* 551. 168 pp., illus., 1937.

Determination of normal loss expectation was the major objective and accomplishment of the inquiry. Intensive study was made of the loss experience for the 10-year period 1921 to 1930, inclusive, supplemented by general study of the preceding decade, for all the territory excepting the redwood region of northwestern California which, because of its essential similarity, for purposes of the inquiry, to the Douglas fir region of western Oregon and Washington, was only studied extensively. Study involved not only use of the existing fire records but the collection and analysis of a large quantity of original data, much of which was taken directly from fire-damaged areas in the field.

The figures presented in Tables I and II show the final conclusions of the intensive loss-experience study. Merchantable timber and second growth are shown separately because of the essential distinction, for underwriting purposes, between these two classes.

TABLE I. QUANTITIES AT RISK, ANNUAL LOSSES AND NORMAL LOSS RATES: PACIFIC COAST TERRITORY*

Class	At Risk (000 Omitted)	Net Annual Loss	Rate of Loss
Merchantable timber	455,104 M ft.b.m.	293,232 M ft.b.m.	0.064%
Second growth (and reproduction)	16,214 acres	83,651 acres	0.516%

* Figures for volumes and areas are from the *Forest Survey* (Forest Service, January 1, 1933) and other Forest Service sources, including United States Department of Agriculture, Forest Service, *A National Plan for American Forestry*, 2 vols., 1933 (73rd Cong., 1st sess., Doc. 12).

Conversion of the data in Table I to a value basis gives the results shown in Table II. Conversion to values is based upon a thorough investigation into forest valuation in the territory, particularly from the insurance point of view, which constituted an important phase of the inquiry.

The territory is comprised of four distinctly different regions, the redwood and Douglas fir regions mentioned above, the northern ponderosa pine region of eastern Oregon and Washington, central Idaho, and northeastern California, and the sugar pine-ponderosa pine region of the Sierra Nevada. Independent study was made, and separate conclusions and recommendations presented for each of the three regions studied intensively. The lack of uniformity in the value and loss rate figures shown above is attributable to variation in these factors from region to region.

TABLE II. VALUES AT RISK, ANNUAL LOSSES, AND NORMAL LOSS RATES: PACIFIC COAST TERRITORY

Class	At Risk (000 Omitted)	Net Annual Loss	Rate of Loss
Merchantable timber	$597,596	$456,192	0.076%
Second growth (and reproduction)	56,138	79,279	0.141%
Combined	653,734	535,471	0.082%

While the inquiry was in progress, the Tillamook conflagration occurred. This was the most destructive forest fire in the region in more than 30 years and ranks unquestionably as one of the worst in the history of the whole country. The effects of this fire were considered by the inquiry and influenced the recommendations. In so far as the past can be taken as an indication of future probability, the findings of the inquiry are undoubtedly sound.

The 0.082% loss rate is an achievement of the organized protection that functions throughout the region. This protection, sponsored and financed in part by the Federal Government and in part by the states, formerly under the Weeks Law and in recent years under the Clarke-McNary Law, is a legal requirement. The owners stand part of the cost and are responsible for maintenance of the protection under

jurisdiction of the state foresters, who maintain corps of supervisors and inspectors. The actual application is largely through protective associations maintained by the owners themselves, though some individual owners conduct their own protection organizations, complying with the established standards. Owners who do not otherwise provide protection are assessed for protection supplied by the state.

Because of the intermingling of ownerships in the forested portion of California, the protection there is largely administered by the United States Forest Service, the private owners contributing their share of the cost.

The cost of protection in the region as a whole varies between 2 and 10 cents per acre per year, averaging about 5 cents. A considerable portion of this cost (in recent years approximately ½) is borne directly by the owners. The practice of financing forest fire protection out of the general tax levy, as cities support their fire departments, has not become established. Successful forest insurance practice will, of course, depend upon the maintenance of acceptable protection standards. Insurance cannot, as appears to be sometimes believed, operate as a substitute for protection. Its true economic function is to mop up the residual risk after protection has nearly reached its point of diminishing returns, providing a known and budgetable annual expense in place of an uncertain and troublesome capital discount. The insurance carriers require insured property owners to maintain protection standards and, if the effort is slackened, they are able indirectly, by threats to withdraw or to raise the premium rates, to exert important influences on protective organizations.

Fairchild[2] estimates the average per-acre value of the privately owned forests of Washington, Oregon, and California at $28.40. In the insurance study, the average insurable value in that region has been placed at $24.33 per acre. If $25 an acre can be taken as a fair estimate of the average value, protection at 5 cents an acre amounts to an annual charge of 0.2%, of which the owners are contributing approximately ½. One-tenth of 1% can therefore be taken as fairly representing the owners' probable outlay for protection at the present time.

An average premium rate of 45 cents per $100, if added to this protection cost, will make a total outlay by the average owner, for protection and insurance, of 0.55%. Many forest properties in the region could be insured for a net rate considerably less than the average. Some would be rated much higher—even, in extreme cases, at prohibitive figures. In any event, it appears that close to 0.5% will have to be charged against gross return, during the introductory period, if full insurance cover is carried. There is reason to hope that this figure might be brought down to 0.35% as business expands, provided there is no increase in protection cost.

In practice these rates will not prevail, at least in the beginning, because of the partial-value stipulation that will have to be made a feature of prudent underwriting. To accept liability to the extent of more than ¾ of the sound value of forest properties, at least during the trial period, would not be good practice for insurers. This means that forest owners could spend, on the average, not more than 0.3375% for fire insurance, making the total annual charge, accounted for by the fire risk, slightly less than 0.44%.

[2] Fairchild, F. R., and associates, "Forest Taxation in the United States," *U. S. Dept. Agr. Misc. Pub.* 218. 681 pp., illus., 1935.

It has not yet been possible to study the probable demand for such insurance as is outlined above, although present plans call for such a project in the relatively near future. Meanwhile, rational speculation leads to the conclusion that forest owners can afford this insurance premium. The writer's personal conviction, difficult, of course, to check statistically, is that the normal contingent allowance, in the absence of fire insurance, contains or should contain a minimum item of 1½ to 1¾% for the fire risk alone, even under the existing protection system.

In any event, it will always be possible for owners to scale the amount of insurance to be carried according to their budgets, provided this insurance represents a substantial portion of their total values. Partial insurance, other things being equal, is better than none at all, and the practice of increasing the coverage as rates are lowered, if this proves possible, may be desirable both for the insurers and the insureds. It is probable that insurance of even ½ the value would help materially in stabilizing forest ownership in preparation for the shift to the permanent management basis. It is hoped that eventually owners could be allowed to carry full insurance if they so desired.

Other features of forest fire insurance offer interesting possibilities. The increased value of insured forest properties as collateral security for credit purposes is obvious. Some of the administrative features of forest insurance will probably be unique. For example, it may be advisable to refer all forest fire losses to arbitrators as a matter of general principle.

During the trial period, at least, the use of a 100% co-insurance clause will be advantageous. A proposed differential premium rate schedule[3] provides for allowance for variations in hazard resulting from variations in the effectiveness of the protective effort, the local climate, physical factors such as relative susceptibility to fire damage of different tree species, stand densities, presence or absence of logging slash, and other factors. Provision is made also for differentiation with respect to exposure or non-exposure to fire-causing agencies, such as railroads, recreational entry, logging operations, etc. Provision is also made for credits for the less usual conditions which reduce the hazard, such as artificial firebreaks, electric logging equipment, and extra fire patrols (watchman service).

A forest insurance study is now being conducted in the Northeastern States. Though it is too early to present detailed conclusions, it appears that a large aggregate of forest property in that region is well adapted to fire insurance. There is reason to believe this is also true in some other sections of the country. Some sections are evidently not yet adapted, either because of excessive natural or man-caused hazard conditions, or because of a lag in the development of organized protection. Such conditions exist locally, also, within regions mainly favorable, with consequent underwriting problems. Nevertheless, fire insurance can reasonably be expected, sooner or later, to play a part of considerable importance in the development of the national forestry program.

[3] In "Forest Fire Insurance in the Pacific Coast States," cited in footnote 1.

Public Contributions of Municipally Owned Electric Utilities Compared with Taxes of Private Electric Utilities in Minnesota

By ARTHUR BORAK*

Introduction

THE relation of public operation of utilities to public finances is of special interest at the present time. Much of the opposition to such operation is based on fear that taxes will be increased to cover operating deficits; on the other hand, public operation is advocated by many as a means of obtaining net income with which to reduce taxes. Closely allied is the controversy as to whether or not publicly owned utilities should pay taxes. The gross amounts of municipal public utility receipts are very substantial in some cases, though whether they afford net revenues or net deficits the records in numerous municipalities are not sufficiently accurate to reveal. These utilities are not legally subject to taxation in Minnesota. They are also exempt from federal taxation. At times in some places, however, they contribute funds or money transfers from their receipts, or else free services to the municipality, or both. In this article, to the extent permitted by available data, such contributions are identified as to nature and amount, and compared with the taxes paid by private utilities. The claim that public ownership and operation result in diminishing or eliminating municipal tax levies and debts is also examined.

The discussion which follows is intended to be as objective as possible, and devoid of sentiment or other prejudices for either public or private operation. The objective is merely to clear the atmosphere surrounding controversial and much discussed matters concerning which basic facts or attempts to get them have been conspicuous by their absence. This study pertains primarily to electricity. However, the close interrelationships in the operations involved in supplying electricity, heat, and water, and the lack, more or less, of interdepartmental accounting make impossible, with respect to some items, a treatment of the electric enterprise alone. Where electricity is supplied by the municipality along with water and sometimes heat, the electric phase of the utility occasions the bulk of the investment, receipts, net earnings, and contributions. Besides, the electric department, it will be found, sometimes subsidizes the water department, and quite frequently the heat department. Furthermore, most of the controversy concerning public and private ownership, rate policy, and other utility matters pertains to electricity.

There is a great variation in the extent of municipal ownership and operation of services in Minnesota. Every city has a water system except Tracy, where the facilities are privately owned. The water system is the only publicly owned utility in some cities, however—notably, Minneapolis, St. Paul, St. Cloud, Albert Lea, and Eveleth. Other cities, for example, Chaska, Staples, and Ely, own in addition an electric distribution system, the current for which is purchased from private utilities at wholesale. When the city generates electric

* Assistant Professor of Economics, University of Minnesota.

current with coal or gas, it generally has a heating system, as is the case in Austin, Fairmont, Marshall, and Rochester. The heat facilities are usually confined to the business area, but in Marshall a few apartment buildings and in Virginia most of the residences are also thus heated. Some cities, for example, Thief River Falls, generate with Diesel engines and do not supply heat. In a few cities, among them Virginia, the city supplies its own gas in addition to water, light, and heat. Two Harbors owns its systems for water, light, and gas and also an ice plant and coal yard. Duluth has a distribution system for gas, which is purchased at wholesale from the Zenith Furnace Company.

Of the 727 incorporated cities and villages in the State, 51 with populations totaling approximately 174,000, generate and distribute electricity; and 75, with populations totaling 110,000, distribute electricity purchased from private utilities. Of the latter group, 15 purchase the current from publicly owned plants in near-by communities and 60 purchase at wholesale from private utilities.[1] Hence electric enterprise in most of this group of cities and villages is a hybrid of public and private ownership and operation. Since 1886, 136 Minnesota cities and villages have generated electricity at one time or another. The high point was reached in 1906, when 106 had generating plants. Most of the 85 cities and villages that have ceased to generate current now purchase and distribute it.[2]

Amount and Kinds of Public Contributions of Municipally Owned Utilities

The total municipal receipts were obtained and analyzed for 43 of the 95 cities in the State: the 3 cities of the first class, with populations of 50,000 and over; the 3 cities of the second class, with populations of from 20,000 to 50,000; 4 of the 8 cities of the third class, with populations of 10,000 to 20,000; and 33 of the 81 cities of the fourth class with populations of less than 10,000. These cities contain the greater part of the urban population of the State.[3] It was found that, for the fiscal years of these communities, all or the bulk of which covered the calendar year 1933, the aggregate money transfers from publicly owned utilities, realized by 12 cities, amounted to a little less than 1% of the aggregate current receipts of the 43 cities, including these 12. The receipts included all current tax and non-tax receipts, exclusive of loans and gross public utility revenues but including utility transfers. Including only cities which generate their current or distribute purchased current (thus excluding the three large cities of the State and others), the ratio of aggregate transfers realized by seven cities (four generating current and three distributing purchased current) to the aggregate current receipts of 22 cities (13 generating current and 9 distributing purchased current), including these seven, was about 10%. The transfers in the above ratios were mostly but not entirely from electric revenues. Four cities, one generating current and three

[1] *Minnesota Year Book*, 1935, pp. 216-29, with corrections to date.

[2] *The Local Nature of Electric Service*, a pamphlet issued by the North Central Electric Association, Minneapolis, in 1933, with adjustments to bring the data in this pamphlet to date.

[3] For all but 13 fourth-class cities data were obtained from audit reports of the state examiners, from audited reports by private accountants on file in the city hall and in the office of the public utility, and from records of the city clerk and public utility. The receipts for the other 13 cities of the fourth class were obtained from printed published reports sent to the writer upon request.

distributing purchased current, made unusually large transfers during the fiscal year involved. The unusually large transfers made in some communities in recent years have no doubt been occasioned by the financial difficulties of the localities with great demands for revenue and decreasing tax resources. Therefore, the last ratio above should not be taken as typical of cities with publicly owned electric facilities, either at one time or over the course of time. Of course, these payments vary from year to year and do not have the regularity of a tax. In some years they have enabled communities of the State to reduce greatly or dispense with the property tax levy for the general fund, but none have been made tax-free thereby.

Direct payments from the utility to the city treasury may be comparatively small, but it is important to realize that a municipally owned utility may make other contributions to the city in the form of water, electric, and heating service for public buildings, parks, and streets at no charge or at smaller charges than those that would have to be paid to a private utility. If the utility receives no tax-paid subsidy, these free or partly free services, as well as monetary transfers, are non-tax revenues contributed by users of the utility services rather than by the taxpayers as such. The two groups may be quite different. In the case of water they are probably nearly identical; in the case of electric current somewhat less so; and in the case of heat still less so, because the heating facilities are generally confined to the business section of the city. The difference in the utility rate-base and the tax-base may make the contribution of a utility customer toward raising a sum for public purposes quite different when that sum is to be raised by taxes and when it is to be contributed by utility earnings. Some outstanding specific cases of transfers and free services may well be considered here. The cases below pertain to the utility as a whole rather than merely to the electric department. The separation of the latter is not possible in some cases.

Transfers from the utility in Rochester have recently been so substantial as to be almost unique. Of the $167,383 transferred for the year ending March 31, 1934, $9,000 was paid as rent for office space in the city hall, of which $6,000 was from the light department and $3,000 from the water department. The heat department paid no share of the rent. This amount ($9,000) is equal to the annual principal payments falling due on an original 1932 issue of $180,000 city hall 4.5% serial bonds. The city pays the interest, and the utility will continue to pay the principal. On January 1, 1932, the utility began paying the city 10% of its sales of electricity and water as a "gross income or earnings tax." Thus for the year ending March 31, 1934, the city received $33,496 from the electric department and $8,064 from the water department. Sales of service to the city, as well as interdepartmental sales of electricity and water between the water and electric departments, are included in calculating this tax. The heating department does not pay this tax. These taxes ($41,560) went to 12 city funds. According to the records of the city, the general fund received $11,693; the fire protection fund, $6,238; the sinking fund, $5,155; the lighting fund, $4,904; the park improvement fund, $4,803; and seven other departments, $8,767. In addition, a transfer was made, for the first time, from the electric department to the sewer fund, the amount being $66,320; $50,503 was transferred from the water fund, $27,475

of this sum going to the bridge fund and $23,028 to the street and alley fund.

According to the state examiners' financial statement, the net income of the Rochester utility, for the year ending March 31, 1934, was $147,723 after interest, depreciation, and the $9,000 rent item were deducted. Such contributions took almost all the electric department's net income and all the net income of the water department, after deduction of interest and liberal depreciation, for the year ending March 31, 1934. Besides, surplus was reduced by more than $10,500 according to calculations of the state examiners. These transfers amounted to about 33% of the city's current receipts for that year. However, this was a year of very unusually large transfers in Rochester—in fact, much the largest on record. Some years ago property owners paid for water-main extensions through special assessments. But since the policy of financing them from utility earnings has been adopted, the water department has been gradually refunding all payments of previous assessments either through cancellation of service charges to the amount of the balance due or through direct refunds to owners of rented property. Incidentally, it is interesting to note that the electric rates to customers are comparatively low. The relatively high efficiency of the Rochester electric property is ascribable to the fact that it serves a highly concentrated business area which in 1933 absorbed 43.2% of all electric current sold; varying portions of the electricity are supplied from a hydro-electric plant 16 miles from the city where generating costs are much lower than for the steam plant in the city; and, last but not least, it is directed by a very able management.

At Austin, $30,332 was transferred, in the fiscal year ending February 28, 1934, to the city to pay off city bonds. This amount was about 13% of the city's current receipts for that year. The net income for the utility for the year ending Feburary 28, 1934 was $115,454 after depreciation was deducted but before the above transfer was made, according to an auditor's financial statement. In 1933, $65,382 was transferred, and in 1932, $53,086. From 1927 to 1932 a yearly average of $29,326 in city bonds was paid off from utility earnings. The original debt incurred by the city in building the utility has been retired. When the remaining sewer bonds are retired, utility service rates will be reduced. Water is furnished free to the fire department and for sanitary purposes, parks, and street sprinkling and flushing. The city pays $10 a year per hydrant, which is considered to cover fire protection only. Water, light, and heat are furnished free to the city hall, which is on the second floor of the utility's office building. The city pays no rent for this space. Furthermore, the utility finances water-main extensions, and probably will ultimately bear about ⅔ of the cost for the street lighting system of the main street rather than about ⅓, as originally planned. Austin's utility supplies water, electricity, and heat.

In Fairmont a transfer of $13,000 in the year ending February 28, 1934 consisted of $3,000 from the heat department to the general fund, and $10,000 from the water and light department, of which $8,500 went to the general fund and $1,500 to the sewer fund. Transfers have not been regularly made in the past. The transfers above, which were about 11% of the current receipts of the city for that year, have been made partly for the reason that the utility pays no taxes. Partly for the

same reason, the city parks are lighted without charge. The utility finances water-main extensions except for a nominal charge of five cents per front foot per year for 10 years paid by the benefited property owner. According to an outside accountant's financial statement, the net income of the utility for the year ending February 28, 1934 was $41,230 after deduction of interest and depreciation but before the transfer of $13,000. Fairmont's utility furnishes water, electricity, and heat.

In Sauk Center transfers of $23,500 to the general fund and $5,386 to the water department were made from the electric department in the year ending March 31, 1934. These transfers exceeded all other current receipts of the city combined for that year. Since the utility net income for that year, according to the financial statement of the state examiners, was only $11,168 after deduction of interest and depreciation, past accumulations were drawn upon to provide these transfers. The utility at Sauk Center furnishes water and electricity which is purchased from a private utility.

For the five fiscal years ending April 30, 1933, transfers from the utility to Lake City aggregated $50,508 for sewer maintenance and construction and principal and interest payments on sewer bonds. Since 1930 all water and electric service to the city has been free. Lake City's utility furnishes water and electricity which is purchased from a private utility.

At Marshall and Virginia the utilities, which furnish water, electricity, and heat, finance water-main extensions out of utility earnings. Incidentally, the electric rates to the customers at Virginia are the lowest in the State.

At Two Harbors the water and light fund seems to bear more than its share of the payroll of the city hall for clerical work performed for the utility by city employees. It pays all of one salary, over ½ of two others, and ⅓ of another. One-third of one salary is paid from the gas fund. On the other hand, the utility pays no rent for city hall space. Water and gas-main extensions are being financed out of utility earnings. No depreciation reserve has been set up. The water and electric services, as far as indicated by the incomplete accounting, appear, according to the state examiners, to be self-supporting and the gasworks might be if more customers were secured. If they are not, the city will have to pay a substantial amount of outstanding orders issued in connection with construction of the gasworks. At Two Harbors the utility furnishes water and electricity generated by the city. Incidentally, butane gas is also supplied by the city.

Some of the properties referred to above may be taken as typical of the best but not by any means of all municipally owned utilities in the State. For some of the other publicly owned utilities it appears that poor financial results, inadequate accounting, and unwillingness of the management to furnish information go hand in hand.

Depreciation

Some consideration should be given the matters of the degree to which the utility is self-supporting and whether the contribution or transfer represents the draining away of the plant investment, which will some day need to be replaced. It is important to bear in mind that, when a depreciation reserve is not provided for or is provided for at comparatively low current rates, other factors, such as the liberality of the policy in regard to replacements and the earning power of the property, must

be taken into account before conclusions of adequacy or inadequacy can be drawn.

Even when a city pays interest and principal on utility bonds out of its general funds, the utility may be self-supporting, for the city's outlays may be balanced by contributions made to the city from time to time. Records covering a period of years need to be examined to get an accurate picture; the operations of a single year, which is as much as has been referred to in the above cases, constitute a rather unreliable basis for dogmatic conclusions.

Many of the municipal utility properties have undergone recent appraisal, sometimes as a result of a decision to make the utility self-sustaining and remove it from politics by placing it under an independent commission appointed by the mayor. In several instances the utility has been given separate office space in the city hall or in a separate building and provided with its own clerical force to maintain its records, which had formerly been kept by the city clerk and his force. The property account was entered on the books according to the appraisal and a depreciation reserve set up. If no depreciation reserve had been set up previously or if it had been inadequately built up, then a more liberal annual depreciation provision out of earnings had to be provided during the remaining life of the property. With ordinary depreciation rates on various kinds of property which assume consistent provision for depreciation from the start, a utility may encounter difficulties in remaining on a self-sustaining basis when it comes to replacing the property, unless earnings are very substantial or replacements have been liberally made. The ordinarily accepted depreciation rates currently being charged may be inadequate. In order to check the adequacy of the reserves, however, it would be necessary for competent engineers to make physical examinations of properties and for competent cost accountants to analyze the records. In many cases the municipality has in the past supplied the funds in whole or in part for the construction of its utility. Whether or not this investment has been returned to the city from utility revenues is questionable in many cases. In general, records are either non-existent or inadequate to settle this point.

Inadequate provisions for certain costs, particularly depreciation, and inaccurate accounting practices, for which public enterprise, including some cases in Minnesota, is notorious, make uncertain the degree to which some publicly owned utilities are self-supporting, and, when a transfer or contribution is made, whether it is return *from* the investment or a return *of* the investment. Of course, the utility management will allege that the utility, particularly the electric enterprise, is at least "breaking even" and that the transfer or contribution represents a return from results of operation above that necessary to cover all costs. Some municipal utility managers in Minnesota claim it is very difficult to resist public pressure for rate reduction, which, if granted, renders it impossible to make adequate provision for depreciation. Some people apparently think that rates should be predicated upon bare operating expenses exclusive of interest charges or of depreciation, of which they understand almost nothing. Quite frequently the public insists that the rates be made to cover current operating costs and no more. Recent recommendations from several quarters in favor of municipal ownership and operation of electric plants and in favor of state and federal

legislation encouraging municipal ownership and operation are all aimed at forcing rates of private utilities down and also at making possible reductions in municipal utility rates through lower costs arising from extensions of the service.

An old publicly owned utility, which furnishes water, electricity, and heat to a city of about 3,000 in Minnesota, presents an interesting case concerning depreciation. An examination of the financial statements over the course of years shows that, for various parts of the property, annual depreciation charges are inadequate to retire the investment over the contemplated life of the pieces of property. At the end of the period in each case a part, sometimes a substantial part, of the investment remains. However, in the next financial statement the residual item just disappears. The result of all this is an understatement of costs and overstatement of net income over the period. Of course, perfect forecasting is impossible, but the extent of the consistent inadequacy in this case is unnecessary. In Rochester there are what some accountants call "real" depreciation reserves. On April 1, 1932, two investment sinking funds for depreciation reserve were set up, one for the electric and one for the water department. At that time the electric department transferred $75,000 in cash to its fund. Since that time, additions to the depreciation reserves have been definitely set aside in purchased marketable bonds through the transfer of the annual depreciation provision, less retirements and replacements, from the cash account to the investment sinking fund for depreciation reserve, wherefrom cash is converted into bonds. These bonds are securities of the State of Minnesota and certain Minnesota counties and municipalities, including such bonds of the City of Rochester as the utility has been able to acquire.

Transfers and Free Services versus Taxes

Municipally owned utilities do not pay taxes in Minnesota.[4] But, as pointed out previously, they sometimes make contributions to their municipalities in the form of money transfers and free services. There is a great deal of controversy as to how these compare with the taxes that would be paid to these cities and other political units if the utilities were privately owned. From the point of view of considerations having to do with public ownership and operation and taxes in general, the subject of this controversy is very important. Here factual findings or attempts to get them have been conspicuous by their absence. However, speculation and loose generalizations have been abundant. Data compiled for Minnesota, which are presented in Tables I, II and III below, shed some light on this question.

In these tables the contributions of money transfers and free services to the municipality by electric utilities in communities with municipally owned electric generating plants are compared with both total (federal, state, and local) taxes and state and local taxes paid by private electric companies which serve communities in the State. The communities which own their electric distributing systems through which they sell at retail current purchased at wholesale are omitted. The bulk of these communities represent neither public ownership nor private ownership, but a hybrid of the two, as previously pointed out. The contributions and taxes are reduced to ratios or percentages of gross revenue to permit a

[4] Besides federal taxes, the private utilities in Minnesota are subject to state and local taxes, including the state and local property tax levies.

comparison of the two groups over the 13-year period covered in this study. An effort was made to obtain the necessary data for such a comparison covering as many communities and private electric companies as possible. The data pertain to a good portion of the publicly owned generating plants in the State and to several large private electric companies serving a substantial portion of the communities in the State which rely on private companies for their current. The communities in both groups are spread throughout the State. The data pertain to electricity except in a few cases for the municipally owned generating plants in Table I, where the amounts for gross revenue include some water and steam heating revenues. In these cases no separation of electric from other utility revenue is made in the financial statements or the accounting systems.

In Table I the aggregate amounts of gross revenue for each year are for the total number of communities, as designated in the first column. The total number includes a somewhat smaller number for each year where contributions of one kind or another have been made. The others made no contributions. The aggregate amounts of these contributions for each year appear in the fourth column. They represent the sum of the money transfers, exclusive of loans not definitely written off, and the money value of free services. The money transfers are money contributions to the municipality—usually to the general fund—and to the water department in the case of two plants where such were made and at the same time the electric department is separated from the other utility departments in the financial statements or the accounting systems. The free services pertain to current for street lighting and also in the case of six plants for water pumping where the electricity and water are financially separated. These two items constitute practically all the free services of an electric utility. The others, like current for lighting the city hall, are comparatively insignificant.

TABLE I. ELECTRIC UTILITY REVENUES TRANSFERRED TO OTHER MUNICIPAL FUNDS AND THE VALUE OF FREE SERVICES TO MUNICIPALITIES IN COMMUNITIES SERVED BY MUNICIPALLY OWNED GENERATING PLANTS IN MINNESOTA*

Year	Number of Communities	Total Electric Gross Revenue	Number of Communities with Transfers and Free Services	Amount of Electric Transfers and Free Services	Ratio of Transfers and Free Services to Gross Revenue
1922	4	$ 659,434	2	$ 23,589	3.58
1923	7	988,370	2	10,950	1.11
1924	12	1,312,368	4	20,925	1.59
1925	11	1,244,060	6	48,786	3.92
1926	12	1,444,406	6	37,891	2.62
1927	15	1,814,088	8	28,101	1.55
1928	16	1,896,266	11	54,703	2.88
1929	16	1,974,721	9	66,823	3.38
1930	18	2,159,629	14	131,843	6.10
1931	20	2,231,046	14	226,928	10.17
1932	22	2,159,933	18	295,889	13.70
1933	19	1,890,903	17	259,632	13.73
1934	14	1,425,326	12	122,417	8.59
Total	.....	$21,190,550	.....	$1,328,477	6.27†

* The data in this table have been compiled from information obtained in financial statements, auditor's reports, various issues of the *Minnesota Year Book*, and interviews with various publicly owned and private utility officers and employees.
† Combined ratio.

The money value of these free services was obtained by applying the rates charged by a private electric company in the nearest community of comparable size for current for these purposes to the amounts of current involved in the free service. In each case the rates in effect during the year in which the free service was given were used. If some charges were made by the municipally owned plant, the excess of such rates or charges of the private electric company over the rates or charges of the municipally owned plant were applied to the amounts of current involved. Incidentally, the gross revenues of the publicly owned plants, as recorded in financial statements or accounts, were corrected where necessary to include the money values of the free services. Hence, in 1932, as indicated in Table I, 22 municipally owned generating plants had aggregate gross electric revenues of $2,159,933. Eighteen of these 22 plants contributed in the aggregate $295,889 to their municipalities in electric money and free services. The latter amount was 13.7% of the aggregate gross electric revenues of the 22 plants.

Cases where transfers occurred from the municipality, or, where financially separated, from the water department to the electric department (direct subsidies), or where the municipally owned plant's charges for current for street lighting and water pumping were higher than charges of the private company serving the nearest community of comparable size (indirect subsidies) were ignored. If accounted for, however, it appears that the adjustments would not be significant in influencing the results. Besides, all-night service for center lights in all cases and either all-night or midnight service for ornamental lights, as the case may be, were assumed with respect to street lighting in applying the private utility rates. In some cases, lights of some municipally owned plants are on a moonlight service basis. The effect of this assumption was to enlarge the money value of free service in some cases. Incidentally, the adequacy of the provision for depreciation may be questioned with some of these plants. Furthermore, such data as those compiled and analyzed in this study are obtainable only for municipally owned plants which publish financial statements or maintain accounting systems of comparatively good quality. As a rule, such plants are very likely to be those with good financial results. Therefore, it is very probable that the plants represented in Table I compare more favorably with the private electric companies represented in Table II than would all municipally owned plants in the State. In any case, omitted free services of a minor nature rendered by these plants are more than offset. In short, the position taken here is that the situation with respect to the municipally owned electric plants is presented in Table I in a fair and reasonable manner. The group of plants, most of which are shown to have been making contributions during the 13-year period, may be considered a system of plants to be compared with the several private electric systems, each with their various generating plants serving numerous communities.

The ratios for the municipally owned plants, as indicated in Table I, show a rough uneven tendency to increase over the period covered. The comparatively high ratios for the years 1931, 1932, and 1933 were attributable primarily to the unusually large transfers made by three of the plants during these years. For some of the others, the transfers were made for the first time or

became larger after 1930. No doubt the financial difficulties of the communities contributed to this tendency.

The data for electric taxes and electric gross revenues for several private electric companies serving a large aggregate of communities in Minnesota are presented in Table II. The amounts for gross revenues and taxes pertain to the entire company in each case. One of the companies does business also in an adjacent state. No adjustment was made in this case to apportion to Minnesota, on the basis of gross receipts or any other basis, a share of the taxes. Most of the business of this company is carried on in Minnesota. If the adjustment were made, it appears that the influence, if any, would be to increase the ratios in Table II because of marked differences in the relationships between the various taxes and business in the two states. Ratios are presented for both total federal, state, and local taxes and also state and local taxes. Some people, in viewing this problem of contributions versus taxes, assume that municipally owned utilities should not be considered in any way with reference to federal taxes. In fact, some people take this position with respect to the taxes of all governmental units except the municipality. On the other hand, it must be remembered that some one must pay taxes to support the governmental units, including the Federal Government. The private utilities pay taxes toward the support of all of them.

The series of ratios in Tables I and II are brought together in Table III. The ratios for the municipally owned plants may be compared with both the ratios of total taxes and ratios of state and local taxes of the private companies.

As indicated in Table III, the ratios for the municipally owned generating plants are less than either of the corresponding ratios for total taxes or for state and local taxes for private electric companies, with the exception of three years, 1931, 1932, and 1933. As pointed out previously, during these three years unusually large transfers were made in

TABLE II. TAXES OF SEVERAL PRIVATE ELECTRIC COMPANIES SERVING COMMUNITIES IN MINNESOTA*

Year	Total Electric Gross Revenue	Total Federal, State and Local Taxes Charged to the Electric Department	Ratio of Total Taxes to Gross Revenue	State and Local Taxes Charged to the Electric Department	Ratio of State and Local Tax to Gross Revenue
1922	$11,347,467	$ 970,262	8.55	$ 584,788	5.15
1923	12,900,532	1,038,556	8.05	645,435	5.00
1924	15,899,439	1,324,876	8.33	817,446	5.14
1925	23,192,953	1,739,453	7.50	1,228,305	5.30
1926	28,274,019	2,666,715	9.43	1,978,008	7.00
1927	29,894,465	2,729,721	9.13	2,007,657	6.72
1928	31,461,701	2,839,600	9.03	2,194,697	6.98
1929	32,913,154	2,806,186	8.53	2,157,400	6.55
1930	33,834,781	3,004,166	8.88	2,449,608	7.24
1931	34,253,245	2,939,243	8.58	2,653,920	7.75
1932	31,809,745	3,534,440	11.11	2,850,035	8.96
1933	30,489,352	3,619,969	11.87	2,926,343	9.60
1934	32,099,411	4,412,379	13.75	3,374,575	10.51
Total	$348,370,264	$33,625,566	9.65†	$25,868,217	7.43†

* The data in this table have been compiled from financial data obtained from private utility companies either directly or by correspondence.
† Combined ratio.

TABLE III. RATIOS OF CONTRIBUTIONS OF MUNICIPALLY OWNED GENERATING PLANTS AND TAXES OF PRIVATE ELECTRIC COMPANIES TO GROSS ELECTRIC REVENUE IN MINNESOTA*

Year	Municipally Owned Generating Plants	Private Electric Companies	
	Ratio of Electric Transfers and Free Service to Electric Gross Revenue	Ratio of Total Electric Taxes to Electric Gross Revenue	Ratio of State and Local Electric Taxes to Electric Gross Revenue
1922.....	3.58%	8.55%	5.15%
1923.....	1.11	8.05	5.00
1924.....	1.59	8.33	5.14
1925.....	3.92	7.50	5.30
1926.....	2.62	9.43	7.00
1927.....	1.55	9.13	6.72
1928.....	2.88	9.03	6.98
1929.....	3.38	8.53	6.55
1930.....	6.10	8.88	7.24
1931.....	10.17	8.58	7.75
1932.....	13.70	11.11	8.96
1933.....	13.73	11.87	9.60
1934.....	8.59	13.75	10.51
Combined ratio.....	6.27%	9.65%	7.43%

* The data in this table have been taken from Tables I and II.

a few communities. Thus it appears that the combined contributions in money and free services of the electric departments of municipally owned utilities with generating plants in Minnesota over the 13-year period covered in this study, with some exceptions, constitute a smaller ratio of their gross electric income, corrected to include the monetary value of these free services, than the ratio of all taxes or of state and local taxes charged to the electric department to the electric gross income of private electric utilities serving communities in Minnesota. In other words, it appears that, with some exceptions, the contributions in communities with municipally owned generating plants have not been the equivalent of taxes. However, as noted above, there have been exceptions for the municipally owned generating plants in the aggregate for three of the 13 years. Furthermore, in occasional years, some individual municipally owned plants, it seems, have contributed more than the year's tax equivalent. But the rule appears to be the opposite.

Electric Rates

It might be contended that, if the contributions are less than taxes, the service rates to the customers in communities with publicly owned generating plants are lower than those of the private utilities, for the rates may be predicated upon costs of operation which do not necessarily include taxes. Such a contention is not warranted by the data presented in Table IV with respect to current for residential use which is the chief market for publicly owned plants. The data on electric rates gathered by the Federal Power Commission in Minnesota reveal that the average monthly bill for residential use as of January 1, 1935 was lower for 15 and 25 kwhs. and higher for various larger amounts of current, ranging from 40 to 500 kwhs., in 42 communities (out of 47) served by municipally owned generating plants as a group than for 437 communities (out of over 500) served by private companies as a group. In recent years prior to January 1, 1935, there has been a tendency toward electric rate reductions on the part of both publicly owned and private electric utilities.

It might be contended on the basis of the data in Table IV that in Minnesota the private utilities, in charging comparatively less for large amounts of current for residential use, have contributed more than the municipally owned generating systems toward complete electrification of the home. On the other hand, it might be contended that the comparatively large number of

municipally owned electric enterprises in Minnesota has probably been a competitive factor in making for a lower level of electric rates in the State than would otherwise prevail. In any case, the findings of this study indicate the presence of unsuccessful municipally owned electric enterprise in a number of cases along with some successful ones.

Tax Rates and Debts in Communities With and Without Municipally Owned Electric Utilities

From what has been said above, the reader may infer that the property tax levy per capita and the ratio of net debt to assessed valuation are higher in localities where utility service is supplied by municipally owned plants than in those relying on private utilities for service. In the light of the comparative study of contributions of municipally owned electric plants and taxes of private utilities, the tax and debt rates should be higher in the former localities, providing "other things are equal." But other things are never actually equal. However, if tax rates and debts are actually higher, the situation is certainly contrary to that claimed by many enthusiasts for government ownership and operation of utilities. Disputes on this point involving comparative data always pertain to communities with or without municipally owned electric plants, since electric facilities account for the greater part of the investment and revenues in the case of municipally owned public utilities. This limitation is but one of the reasons for care in drawing conclusions from the comparative data sometimes presented. One can take a sample of 20 Minnesota cities with municipally owned electric plants and 20 cities without municipally owned electric plants, exclusive of the

TABLE IV. CHARGES MADE BY MUNICIPALLY OWNED GENERATING PLANTS AND PRIVATE COMPANIES IN MINNESOTA FOR RESIDENTIAL USE OF ELECTRICAL CURRENT*
(Net monthly charge as of January 1, 1935)

	42 Communities Served by Municipally Owned Generating Plants†					437 Communities Served by Private Companies‡				
				Approximate Middle Half of Communities					Approximate Middle Half of Communities	
Kwhs.§	High	Low	Median	Number	Range	High	Low	Median	Number	Range
15	$2.42	$ .30	$1.35	25	$1.20–$1.50	$3.00	$ .90	$1.50	244	$1.31–$1.57
25	4.04	.50	2.12	21	1.85– 2.40	5.00	1.50	2.38	240	2.10– 2.50
40	6.18	.80	3.20	23	2.75– 3.60	8.00	2.18	3.16	251	2.97– 3.98
100	10.13	2.00	5.10	23	4.50– 5.85	15.00	3.30	5.01	219	4.87– 6.12
150	15.12	3.00	6.84	21	6.03– 7.84	22.50	4.89	6.25	222	6.10– 7.64
250	16.88	4.70	9.30	21	8.46–10.12	37.50	6.79	8.70	217	8.15–10.31
500	28.13	9.20	16.20	21	12.60–17.40	75.00	9.29	11.20	230	10.65–16.20

* From data from the Federal Power Commission Electric Rate Survey, Rate Series No. 2, State Report No. 27. The columns showing median charges are interesting. It will be noted that the charges of the private companies are higher than those of municipally owned generating plants for 15 and 25 kwhs. and lower for the larger amounts of current. Furthermore, these charges of the private companies are based upon their actual rates unadjusted for taxes they pay.

† Communities with municipally owned plants not reported are: Delano, Kelliher, Le Sueur, Luverne, and Sleepy Eye. The 64 communities which own their electric distribution systems and purchase their current wholesale from private companies and the 12 communities which purchase their current from neighboring municipally owned plants are not in this table. Such systems are really a combination of public and private enterprise.

‡ The figures for the 437 communities served by private companies reported in the survey are not adjusted downward for taxes which they pay and from which municipally owned generating plants are exempt. Such taxes *in general* appear to be in excess of the occasional money transfers and the monetary value of the free services contributed by the municipally owned plants to their communities.

§ Billings are based on a five-room residence for the following services with the various amounts of current: lighting and small appliances for 15, 25, and 40 kwhs.; lighting, small appliances, and refrigeration for 100 and 150 kwhs.; lighting, refrigeration, and cooking for 250 kwhs.; and lighting, refrigeration, cooking, and water heating for 500 kwhs. These service distinctions are significant, of course, only for communities which have separate rates and meters for them.

three large cities. Results will depend on the selection of the cities that go into the two samples. Furthermore, the tax levy depends on many factors other than what the utility pays. If municipal taxes or debts are being compared, the variation in the distribution of duties between the counties and cities should be remembered. For example, in some counties the county government levies taxes for relief purposes, and in some counties the localities take care of the levy. Furthermore, whether one considers taxes or debts for municipal purposes or for all local purposes, including schools, or for all purposes, including the state, the amounts will vary between cities, depending on the amount and quality of services the people desire their governments to provide and also on the amount of property or wealth that may be taxed to pay for these services. There is no uniformity in services desired or in the per-capita taxable property measure or in any other measure for various local units.

In the comparisons which follow, all cities and villages in the State which own their electric generating plants and distribution systems are placed in one group, and all those which are served by private electric utilities or are without service are placed in another. Here again, as in the previous comparison of contributions and taxes, the localities with publicly owned distribution systems for current purchased at wholesale, mostly from private utilities, or the hybrid cases of public-private ownership and operation, are omitted. Incidentally, 47 communities in the State were served by publicly owned generating plants in 1934.

In Minnesota the median municipal tax levy per capita for 1934 levies payable in 1935 is $8.92 in the 47 communities served by municipally owned generating plants and $6.24 in the 604 incorporated communities served by private electric utilities in 572 cases, and by an unknown type of service, if any, in 32 cases.[5] The median municipal tax levies plus special assessments per capita for the same year for the two groups of communities are $10.35 and $6.65 respectively.[6] The median ratios of municipal net debt to assessed valuation as of January 1, 1935 for the two groups of communities are 8.91% and 2.72%, respectively.[7]

The case with respect to tax- and debt-free cities and villages in Minnesota is interesting. In 1935 only eight of the 727 incorporated cities and villages in the State reported no 1934 municipal property tax levy payable in 1935.[8] These eight communities have populations of less than 300 in each case, and are served by private electric companies in four cases. For the other four localities there are no data as to type of service. Probably there are no electric facilities in these places. Nine communities reported no 1934 municipal levy payable in 1935 for the general fund.[9] Of these, three are served by private electric companies and two are served by publicly owned generating plants. Incidentally, two have publicly owned electric distribution systems but not generating plants. There are no data on the type of service, if any, in the other two places. There were 196 communities which reported no net

[5] These 32 places are very small localities.

[6] Calculated from data in the *Minnesota Year Book*, 1935, pp. 92-107.

[7] Calculated from data in the *Minnesota Year Book*, 1935, pp. 179-90. Mountain Lake, whose plant began operations in the summer of 1935, is included in the second group of communities with respect to the above ratios.

[8] Compiled from data in the *Minnesota Year Book*, 1935, pp. 92-107.

[9] *Ibid.*

debt as of January 1, 1935.[10] Of these, 169 are served by private electric companies and two are served by municipally owned generating plants. Incidentally, 12 have publicly owned electric distribution systems but not generating plants. There are no data on the type of service, if any, in the other 13 places.

It might be contended that the comparatively larger debts on the average in localities with municipally owned generating plants may be attributable in part to the acquisition or construction of their electric facilities, which constitute valuable earning assets behind the loans. As to the comparatively higher taxes on the average in these localities, it might be contended that the situation is only a statistical accident; the differences in tax rates among various communities may reflect differences among communities in the distribution of public functions between cities and their county governments, in the amount and quality of services which the people desire their governments to provide, and in the amount of property or wealth that may be taxed for these services, all regardless of municipal or private utility ownership. On the other hand, it might be contended that municipal ownership is not successful in some places and also quite generally not conducive to results alleged by some enthusiasts for it. In any case, freedom from local taxes or debts does not seem to be associated with any particular type of utility ownership.

[10] Compiled from data in the *Minnesota Year Book*, 1935, pp. 179-90.

[11] But to include both depreciation and sinking fund or amortization of investment might mean double allowance for cost of the plant. If a community pays all interest and retires its purchase bonds during the life of the plant, it need not also set up a depreciation reserve out of which it can restore the plant if it wants each generation to finance its own services. If, however, a community owns a public utility plant free of debt and has no interest to pay on it, it should build a depreciation reserve with which to replace it when worn out if it wants to pay its own way and leave the next generation in as good a position as it found itself. The differences between public and private accounting and the legitimate requirements of public policy should be kept in mind in this connection.

Conclusions

Mention has been made of the diversity in accounts of municipally owned utilities which makes analysis difficult. It is very unfortunate that services from the utility to the municipality, such as street lighting, are not always charged and paid for by the city, as is done at Rochester and Virginia. It might be well also if municipal electric plants included in costs upon which rates are based not only provision for depreciation but also the equivalent of taxes that a private utility would have to pay. Such a charge might well be collected. Rochester is to be commended in this respect. Minimum electric rates to which the utility customer is entitled are those predicated upon costs of operation including interest on debts, reasonable provision for depreciation,[11] and the tax equivalent.

The findings of this study in Minnesota, on the whole, indicate that the contributions of municipally owned electric generating plants to their communities generally have not been the equivalent of either total federal, state, and local taxes or state and local taxes; that such public ownership has not resulted in comparatively low municipal tax rates or debt; and that the public has not realized an offsetting gain in the form of comparatively low electric rates from such ownership.

The Status of Homestead Tax Exemption in the United States

By ALONZO B. MAY*

FOR many years there has been considerable agitation, particularly since the end of the World War, for relief of the small property owner from his heavy burden of property taxation. During the current depression the agitation has taken on the guise, in the main, of homestead tax exemption proposals, which have had wide popular appeal not only because they promise an *apparent* relief from a burdensome tax but because they encourage home ownership.

Homestead tax exemption may be generally defined as a policy of the state to remove from the tax rolls either all or a part of the assessed value of the taxpayer's legal and declared homestead. Usually certain limitations are imposed. These generally include such provisions as: (1) the taxpayer must be a citizen in residence of the state in question; (2) he must own and occupy the property on which he is seeking the relief; (3) his property must come within the constitutional or statutory concept of a homestead; (4) exemption from payment of the real property tax will not include special assessments or improvement liens.

Homestead exemption laws may be classified as either *de jure* or *de facto*. Where the statute definitely provides for homestead exemption with the avowed purpose of discriminating in favor of home owners, the law is *de jure*. On the other hand, a *de facto* homestead exemption policy obtains, where, by means of property classification, the state values homesteads for tax purposes at a lower percentage of their true values than non-homestead properties.

Nine states have adopted some type of homestead exemption proposal. These states are Florida, Louisiana, Minnesota, Mississippi, Oklahoma, West Virginia, Texas, Utah and North Carolina. The last two states named above adopted amendments to their respective constitutions at the November, 1936 election permitting their legislatures to enact homestead exemption legislation. Other states which have considered but not adopted homestead exemption measures include Alabama, Arkansas, California, Colorado, Georgia, Idaho, Illinois, Iowa, Kansas, Massachusetts, Michigan, Minnesota, Missouri, Montana, Nebraska, New Mexico, Nevada, New York, North Dakota, Ohio, Oregon, Pennsylvania, South Dakota, Tennessee, Texas, West Virginia, Washington and Wyoming.

Florida

The State of Florida in 1934 passed a constitutional amendment exempting from taxation all rural homesteads comprising not more than 160 acres and all urban homes occupying not more than ½ acre, provided the properties do not exceed $5,000 in assessed valuation. The law requires that the recipient of such relief be a head of a family, a citizen and a resident of Florida, that he possess either a legal or a beneficiary title in equity to the real property located in Florida, and that he use the said property for the purpose of a permanent home. The Florida law is

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unique in that it is possible for owners of houses now rented to obtain a homestead status for their property by merely substituting purchase contracts for leases. It has already been held by Florida courts that a purchase contract will sustain a homestead estate.[1] Therefore, it is quite probable that nearly all residential property will acquire the status of a homestead and thus be eligible for exemption.

One of the first questions to reach the court was that pertaining to the liability of owners of tax exempt property relative to the cost of public debt-service for debt incurred prior to passage of the homestead exemption act.[2] The case was a mandamus proceeding instituted against the county commissioners of Duval County in which an endeavor was made to compel the county commissioners to increase the tax levy on non-exempt and non-homestead property to meet the interest and sinking fund requirements on county bonds issued at a time when all property located in the county was subject to taxation for the purpose of paying the principal and interest on said bonds. On appeal from the lower court, which held that homestead property was subject to taxation for debt previously incurred, the Florida Supreme Court justices divided evenly and thus automatically sustained the decision of the court of original jurisdiction. Circuit Judge Campbell in reviewing the case said:

"When the bonds referred to in the alternative writ were issued, the law provided for the levy of a tax on all the taxable property, real and personal, in the territory covered by the taxing districts, or in the county by the taxing districts, or in the *county* where county-wide bonds were issued. The bondholders purchased the bonds with the assurance that under the statutes taxes were to be levied annually on all property including homesteads, to provide funds to take care of interest on the bonds and to create and maintain a sinking fund for the retirement of the principal. This provision for the levy of a tax, and the kind and class of property upon which such tax for debt-service on the bonds was to be made, was a very essential element entering into the obligation of the contract of the bonds."

Florida courts, furthermore, have construed the homestead exemption law against aliens. In the case of *Stewart* v. *State ex rel. Dolcimascolo* the circuit court held that an alien, who is the head of a family and who resides in the State of Florida, is entitled to homestead exemption privileges accorded to citizens and residents of the said state.[3] The Supreme Court of Florida reversed the decision of the court of original jurisdiction, and held that the phrase "citizen of and resides in the State of Florida" in the Florida Constitution was intended to include only such persons as would be entitled to claim citizenship under Section 1 of the Fourteenth Amendment to the United States Constitution, and who otherwise conformed to the provisions of Section 7 of Article X of the Constitution of Florida.[4] The Florida amendment is not a mere enabling act, like that of Oklahoma, which merely confers power upon the legislature to enact exemption laws, but is mandatory and self-executing.

[1] *Hill et al. v. First National Bank*, 73 Fla. 1092; 95 So. 614 (1917).

[2] *State v. Carey*, 164 So. 199 (1935).

[3] 161 So. 378 (1935).

[4] Section 7 of Article X of the Constitution of Florida reads:

"There shall be exempted from all taxation, other than special assessments for benefits, to every head of a family *who is a citizen of and resides in the State of Florida*, the homestead as defined in Article X of the Constitution of the State of Florida up to the valuation of $5000; provided, however, that the title to said homestead may be vested in such head of a family or in his lawful wife residing upon such homestead or in both." (Italics mine.)

Louisiana

In November, 1934, the people of Louisiana gave the legislature power to exempt from:

"State, parish and special taxes, the homestead, bona fide, consisting of lands, not exceeding one hundred and sixty acres, buildings and appurtenances, whether rural or urban, owned and occupied by every head of a family, or person having a mother or father or a person dependent upon him for support, to the value of Two Thousand Dollars."[5]

The legislature in order to protect the public treasuries against a sudden drop in receipts wisely stipulated that the homestead exemption benefits would accrue only to the extent that the legislature provided replacement funds in the Property Tax Relief Fund. The exemption does not extend to any municipal or city taxes except in Orleans Parish where the City of New Orleans is located. In that parish the law applies to "the State, the general city, the school, the levee and levee board taxes." The state treasurer has the duty of reimbursing the general or special funds of the state and any of the state's political subdivisions or bodies and the City of New Orleans, for any money which may be lost by the state because of the homestead exemption act and out of funds provided by the legislature for the property Tax Relief Fund. The law directs that the reimbursements are to be made pro rata out of the Fund. It was further provided that homesteads would not be exempt from parish or special taxes or taxes of the City of New Orleans to an amount greater than the necessary funds available in the Property Tax Relief Fund.[6]

It will be observed that homestead exemption is limited, in that municipalities generally continue to have the power to levy taxes on homesteads; furthermore, the amount of the exemption is contingent upon the amount of money available in the Property Tax Relief Fund.

Mississippi

Mississippi in 1934 passed a homestead exemption law which limited the relief given the taxpayer to state ad valorem levies up to $1,000 of assessed value, providing the homestead in question did not exceed 40 acres in area. The claimant taxpayer is required to be a head of a family and a resident of the State of Mississippi.[7] In 1935, however, the legislature amended Sections 1, 2 and 22 of the 1934 law so as to increase the maximum amount of exemption to $2,500, and the quantity of land to an area not greater than 160 acres.[8]

The law requires that the claimant taxpayer be a head of a family, a resident of the State of Mississippi, and that he hold either a fee simple title, or a life estate to the property claimed as his lawful homestead. In certain cases, a lease of school lands will satisfy the ownership requirements of the law. No part of the building located on the homestead may be used for business purposes except that the owner may rent not more than five rooms in his dwelling to tenants or boarders. Where there are apartment buildings consisting of two or more separate apartments, only the part actually occupied by the owners may be included in the homestead; furthermore, not more than one exemption is permitted on one building, or buildings, with a common owner, or owners, as the case may be. Where homesteads are located within a municipality, the homestead is limited to

[5] Acts 1934, No. 78.
[6] *Ibid.*
[7] General Laws 1934, House Bill No. 321.
[8] General Laws 1935, Senate Bill No. 20.

"contiguous and adjoining lots fronting on the same street or road."

If the homestead under consideration is less than 100 acres in extent and less than $2,500 in assessed value, the head of the family claiming exemption is permitted to select an additional tract, or tracts, nearest that on which the dwelling house is situated, so long as the total extent of the land does not exceed 160 acres in area nor more than $2,500 in assessed value. Only one homestead is permitted to a family group for the purpose of tax exemption.

Another interesting provision in the Mississippi act pertains to the case where the dwelling house is destroyed by fire, flood, storm, or other inevitable accident. If such situation obtains so that the owner is forced to move temporarily to another place, his right of homestead exemption continues for a period of one year after such occurrence.

Texas

Texas adopted at an election held August 26, 1933 a homestead exemption law which exempts from taxation, for state purposes only, homesteads to the assessed value of $3,000. The exemption is not applicable, however, to that portion of the state ad valorem taxes which are levied for state purposes remitted "within those counties or other political subdivisions now receiving any remission of state taxes." Upon the expiration of the period of remission the homestead exemption privilege will be applicable to the counties and political subdivisions no longer receiving such remission.[9]

In 1934 an interesting problem developed relative to a conflict in the charter of the City of Fort Worth and the provisions of paragraph 1-A of Article VIII of the Constitution of Texas.[10] As has been indicated above, the state constitution as amended in 1935 clearly limited the exemption to taxation for *state* purposes. However, Section 8 of Chapter 25 of the Charter of the City of Fort Worth reads:

"All property exempt from taxation by the Constitution and laws of the State of Texas shall be exempt from taxation by the City of Fort Worth."

Section 14 states:

"The City council shall have the power to levy for general purposes an ad valorem tax on all real, personal and mixed property within the territorial limits of the city of Fort Worth not exempt from taxation by the Constitution and laws of the State of Texas."

The appellant contended that the two sections of the city charter above quoted should be construed to have the effect of exempting from taxation all homesteads in Fort Worth which were eligible for exemption from state levies. The court held that a homestead in Fort Worth was not exempt by either the Constitution or the laws of the State of Texas for *city purposes*, either before or after the 1935 amendment. It was declared that a Texas city cannot adopt a charter which is in conflict with the state constitution. Finally, the court stated the rule that, where a judicial inquiry arises as to the power of a municipality, or even the state, to impose a tax,

"the rule of strict construction is applied against such power, but when the general power is conceded, or is clearly shown to exist, and the inquiry arises upon a question of exemption from taxation, the rule of strict construction is applied against such exemption.[11]

[9] Const., Art. VIII, ¶1-A.

[10] *Graham v. City of Fort Worth et al.*, 75 S. W. (2d) 930 (1934).

[11] The court quoted the following cases: *Jones v. Williams*, 121 Tex. 94 (1931); *Great Northern Ry. Co.*

(Footnote 11 continued on page 134)

Incidentally the case of *Sheppard et al.* v. *Hidalgo County* presents an interesting problem and point of view.[12] The Texas Legislature in 1923 passed an act releasing for 25 years the inhabitants of Hidalgo County from the duty of paying taxes levied for state purposes. The legislature was so activated because of the calamities the county had suffered in loss of life and crops during the high waters of 1904, 1909, 1919 and 1922. The Supreme Court of Texas held that the act was unconstitutional in that it was in contravention of the constitutional provision that taxation must be equal and uniform and that all property must be taxed according to its value.

The Minnesota Policy

The homestead tax exemption policy of Minnesota exemplifies a *de facto* procedure rather than *de jure*, in that partial exemption is woven into a fabric of real property classification for purposes of taxation. Prior to the 1933 act, real property was divided into three general classes. Class I consisted of real estate where iron ore was known to exist, and which ore, mined or unmined, was assessed at 50% of its true value. Class II related to unplatted real estate, which was assessed at 33⅓% of its true value. Class III comprised all other real estate, and was assessed at 40% of its true value.

The act of 1933 changed the real property classification law by providing:

"Class 3b. All unplatted real estate . . . which is used for the purposes of a homestead, shall constitute class three 'b' (3b) and shall be assessed at twenty (20) per cent of the true value thereof. Provided, if the true and full value is in the excess of $4000, the amount in excess of the said sum shall be valued and assessed as provided for by class three (3) hereof.

"All platted real estate . . . which is used for the purposes of a homestead, shall constitute class 3c and shall be valued and assessed at twenty-five (25) per cent of the true and full value thereof. Provided, if the true and full value is in excess of the sum of $4000, the amount in excess of said sum shall be valued and assessed as provided for by class four (4) thereof.[13]

Briefly, the classification of platted and unplatted lands is now divided into homesteads and non-homesteads, the former being assessed at a lower percentage of true value. Furthermore, the law gives a preference to homesteads of a value of $4,000 or less.

The constitutionality of the 1933 act was tested in the case of *Apartment Operators Association and Another* v. *City of Minneapolis and Others*, the Supreme Court of Minnesota handing down its decision April 31, 1934.[14] The plaintiffs contended that the classification of real property under the 1933 act violated the uniformity clause of the Minnesota Constitution (Art. 9, par. 1) and the equal protection clause of the Fourteenth Amendment of the Constitution of the United States. The court upheld the constitutionality of the act, and said that the provision in Article 9, paragraph 1, of the state constitution providing that "taxes shall be uniform upon the same class of subjects" does not restrict the power of the legislature to tax or classify, nor does it infringe the equal protection clause in the Fourteenth Amendment of the Constitution of the United States. The court cited the case of *Reed* v. *Bjornson*

(*Footnote 11 continued from page 133*)

v. Minnesota, 216 U. S. 206 (1910); *Henderson Bridge Co. v. City of Henderson*, 173 U. S. 592 (1899). See also *Cooley on Taxation*, art. 672.

[12] 90 S. W. (2d) 811 (1936).

[13] Laws 1933, c. 359. Note: Property falling in Class III is valued at and assessed at 33⅓% of its true value. Property coming within Class IV is valued and assessed at 40% of its true value.

[14] 254 N. W. 443, 191 Minn. 365 (1934).

which held that "the power to classify is primarily with the legislature, and its laws should not be declared invalid unless it clearly appears that they transgress the constitution."[15] The classification, however, must not be unreasonable, arbitrary, or capricious.[16] Furthermore, the classification must operate equally and uniformly upon all persons in similar circumstances. Finally, as the United States Supreme Court stated in the case of *Citizens Telephone Co.* v. *Fuller:*

"Granting the power of classification, we must grant government the right to select the differences upon which the classification shall be based, and they need not be great or conspicuous . . . The state is not bound by any rigid equality. This is the rule; its limitation is that it must not be exercised in clear and hostile discriminations between particular persons and classes."[17]

The case of *Logan* v. *Young et al* is a companion case to the one discussed above.[18] Here the plaintiffs contended that the classification of real property in the act of 1933 discriminated against non-resident owners and therefore was in violation of Article 2, paragraph 3, of the Constitution of Minnesota which provides that "in no case shall non-resident proprietors be taxed higher than residents," and of Article IV, Section 2, of the Constitution of the United States which reads:

"The citizens of each state shall be entitled to privileges and immunities of citizens in the several states."

The Minnesota Supreme Court affirmed the holding of the court of original jurisdiction which had held that the act did not discriminate against the non-resident proprietor *in his capacity as a citizen of another state.*[19] Non-residents are merely placed upon the same footing as citizens of Minnesota owning property not used by them for homestead purposes. The court asserted that the discrimination was not against citizens of another state as such, but against owners of non-homestead property and it made no difference if they were citizens or not.

The Oklahoma Initiative and Referendum

On September 24, 1935, the people of the State of Oklahoma were given an opportunity to decide whether they wished to adopt a legislative referendum permitting the exemption of homesteads from taxation, or whether they desired an amendment by initiated petition. The result of the vote was that the constitution was amended through the initiated petition. Assessments, levies and other obligations contracted before the amendment was ratified were not affected.

The legislative referendum and the initiated proposal present some interesting similarities and dissimilarities to each other. Article 10, Section 6-a of the legislative referendum stated:

"All lands classified as homesteads under the provisions of Section I, Article 12, of the Constitution of the State of Oklahoma, and actually domiciled by the owner, of the assessed valuation of not more than the amount that may be set by the Legislature, not to exceed Fifteen Hundred ($1500) Dollars, shall be exempt to extent of the said sum so fixed.

"No lands classified as homesteads under the provisions of Section 1, Article 12, of the Constitution of the State of Oklahoma that are actually domiciled by the owner and are of the assessed valuation or less, of that amount that may be set by the Legislature, which amount shall not exceed Fifteen Hundred ($1500) Dollars, shall be subject to ad valorem taxation; provided that this

[15] 253 N. W. 102, 191 Minn. 254, 264 (1934).
[16] *Ibid.* at 264.
[17] 33 S. Ct. 833, 836 (1913).
[18] 254 N. W. 446, 191 Minn. 371 (1934).
[19] Italics mine.

amendment to the constitution shall not apply to indebtedness or other valid outstanding obligations heretofore incurred; and for any special benefit assessments which have been heretofore or may be hereafter levied against the same for special improvements under the then or future existing laws; Provided further that nothing contained in this amendment to the constitution shall exempt any homestead or any valuation thereof from the levy of any and all ad valorem taxes now authorized by law and the constitution for the support and maintenance of the common schools including the extra or special ten (10) mill levy as now provided by the constitution and by law."[20]

In contrast to the legislative referendum quoted above, the initial petition which was ratified by the people stipulated the following:

Section 1. "All homesteads as are or may be defined under the laws of the State of Oklahoma for tax exemption purposes, may hereafter be exempted from all forms of ad valorem taxation by the legislature; provided, that all assessments, levies, encumbrances, and other contract obligations incurred or made prior to the taking effect of such act of the Legislature shall in no way be affected or impaired by the exercise of legislative power as authorized by this amendment.

Section II. "Any act of the Legislature, which is authorized by this amendment and which provides that homesteads shall be exempted from ad valorem taxation, shall be in full force and effect for a period of not less than twenty years from the date of the taking effect of such act and for such time thereafter as the same shall remain without repeal or amendment by the Legislature, provided, that the homestead as defined by any such act of exemption may be increased at any time but not diminished."[21]

One outstanding similarity that will be observed is that both the legislature and the people had a maximum exemption figure of $1,500 in mind. On the other hand, the plan proposed and ratified by the people charged the legislature with the duty of defining a homestead, whereas the legislative proposal had accepted the constitutional definition of a homestead as was defined for judicial purposes. A more serious provision in the initiated plan is that which states that once the legislature determines upon a definition of a homestead and sets the maximum figure for exemption, the law cannot be changed for 20 years except to raise the amount of the exemption.

The Laws of Utah, North Carolina and West Virginia

At the general election held November 3, 1936, the people of the State of Utah ratified an amendment referred to them by the legislature which reads as follows:

"The legislature may provide for the exemption from taxation of homes, homesteads, and personal property, not to exceed $2000 in value for homes and homesteads, and $300 for personal property."[22]

It will, of course, be observed that the Utah amendment merely confers the power upon the legislature to enact homestead legislation if it so desires. Noteworthy, also, is the unique provision for a restricted personal property exemption.

The North Carolina electorate, at the election held in November, 1936, also ratified a homestead exemption amendment. It provides that:

"The General Assembly may exempt from taxation not exceeding one thousand ($1000) dollars in value of property held and used as the place of residence of the owner."[23]

What the legislature of that state will do with the new power granted it under

[20] Session Laws 1935, pp. 399, 400.

[21] Quoted by Leonard Logan, "The Oklahoma Tax Exemption Law," *Tax Magazine*, February, 1936, p. 79.

[22] Laws 1935, p. 257.

[23] Public Laws 1935, p. 745.

this amendment is, of course, uncertain.

The amendment adopted by the State of West Virginia in November, 1932, fixing a series of property tax rate limitations, discriminates in favor of residential property occupied by the owner exclusively for residential purposes, and "farms . . . occupied and cultivated by their owners or bona fide tenants." The maximum rate on such property is fixed at $1.00 per hundred dollars of value, and on other real property the rate is set at $1.50 or $2.00, depending upon whether the property under consideration is situated within or without an incorporated municipality. Thus, the property tax limitation law in West Virginia has the effect of a homestead tax exemption law.

Conclusion

The flood of bills providing for homestead tax relief which have inundated our legislative assemblies for the last two or three years clearly shows that homestead tax exemption is not an ephemeral phenomenon. There is little doubt that the general property tax is in dire need of reform. Homestead exemption laws have arisen out of that need. These measures, however, will not obviate but may actually increase the inequities present in the tax. The real remedy lies in a reappraisal of the role of the general property tax in our tax system, in the integrated administration of the assessment and collection routine, and in the replacement of "rule-of-thumb" approximations in property taxation by scientific precision.

I. Simplification of Holding Companies under the Public Utility Act of 1935

By LESLIE T. FOURNIER*

THE most controversial provision of the Public Utility Holding Company Act[1] is Section 11, which has been widely interpreted as requiring, within a very limited time, a wholesale dismemberment of electric and gas utility holding companies under the supervision of the Securities and Exchange Commission. Principally because of their opposition to this feature of the law, most of the major systems declined to register under the terms of the Act and brought suits to test its constitutionality. The Government succeeded in delaying action on these suits, pending a decision by the District Court of New York in the test case which it brought against the Electric Bond and Share Company.[2] Since none of the holding companies challenging the law had registered,[3] and since the various regulatory provisions of the Act apply only to registered companies, the Government sought to confine its test case solely to the constitutionality of the registration provisions (Sections 4 and 5).

On the other side, the Electric Bond and Share Company endeavored to obtain a decision that the Act was unconstitutional in its entirety. The first skirmish, in the United States District Court for the Southern District of New York, ended in a complete victory for the Government when Judge Julian E. Mack, in his decision on January 29, 1937, upheld the contentions of the Government in every respect.[4] Shortly after this decision was rendered there was a break in the ranks of the unregistered companies, when The North American Company and the American Waterworks and Electric Company filed notifications of registration with the Commission. However, since there has been no recession in the industry's opposition to the requirements of Section 11, some constructive purpose may be served by an analysis of the soundness of the policy embodied in this provision of the Act, and an estimate of its probable effects upon the industry.[5] First, it is important to have a clear understanding of its terms.

Summary of Section 11

Section 11 (a) directs the Commission to examine "the corporate structure of every registered holding company and subsidiary company thereof" and determine the extent to which such structure may be simplified, unnecessary

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[1] Public 303, 74th Congress (S. 2796).

[2] For a brief comment on the Supreme Court decision of December 7, 1936, granting a stay of action in the suits brought by The North American Company and the American Waterworks and Electric Company to enjoin enforcement of the Holding Company Act, see 13 *Journal of Land & Public Utility Economics* 96-7 (February, 1937).

[3] On November 22, 1935 the SEC announced that, pending determination of the constitutional validity of the Act, the Government would not invoke criminal sanctions against those who failed to register. Despite the fact that the Commission expressly permitted each registrant to reserve its constitutional rights, most of the major systems refused to register.

[4] The Electric Bond and Share Company has filed an appeal from this decision. (144 *Commercial and Financial Chronicle* 2125 (March 27, 1937).)

[5] In the August issue of the *Journal*, the writer will analyze the requirements of Section 11b (2) of the Holding Company Act concerning the simplification of complex corporate structures; the present article is concerned only with the dismemberment provision.

complexities eliminated, voting power fairly and equitably distributed among security holders, and the properties and business of the system confined to those necessary and appropriate to the operations of an integrated public utility system. Section 11 (b) specifies the action which the Commission must take in order to simplify holding company systems. Under paragraph (1) of this subsection, the Commission is directed, *as soon as practicable* after January 1, 1938, to require each registered holding company, after notice and opportunity for hearing, to take such action as the Commission shall find necessary to limit its operations to a single integrated public utility system[6] and such other business as may be incidental thereto. The Commission *shall* permit a holding company to control one or more additional integrated systems located in a single state or adjoining states on an affirmative finding that such additional systems cannot be operated independently without loss of substantial economies and that localized management, efficient operation, and effective regulation will not be impaired thereby.

This is the provision that has aroused the opposition of the entire industry. Its intended effect, when taken in conjunction with the definition of a holding company under the Act, is to require holding companies, which control scattered properties, to choose whether they shall (a) "turn themselves into investment trusts by making legal arrangements which will deprive them of the control of the management of operating electric and gas companies in which they have investments, or (b) rearrange or reduce their holdings in operating companies . . . so that each holding company will control the management of only a single integrated system of operating companies"[7] subject to the exceptions which have already been described.

Holding companies are to be simplified not only with respect to the geographical distribution of their operating subsidiaries, but also as regards their corporate structures. Under paragraph 2 of subsection (b) the Commission must require holding companies, after January 1, 1938, to take such steps as are necessary to eliminate unnecessary structural complexities and unfair or inequitable distribution of voting power. It is further specifically stated that all holding company systems must be simplified to the point where there is no more than one layer of intervening companies between the top holding company and the operating companies. In other words, it is mandatory that there shall be no holding companies beyond the "second degree."

Although the Commission must initiate its action under Section 11 (b) *as soon as practicable* after January 1, 1938, subsection (c) allows a period of one year after entry of an order (which can only be made after an opportunity for hearing) for compliance therewith

[6] (a) An integrated public utility system as applied to electric utility companies is defined in paragraph (29) of Section 2 (a) as a system, all the units of which are "physically interconnected or capable of physical interconnection" and "may be operated as a single interconnected and coordinated system confined in its operations to a single area or region, in one or more states, not so large as to impair . . . the advantages of localized management, efficient operation and the effectiveness of regulation." (b) An integrated gas utility system is defined as "a system consisting of one or more gas companies which are so located and related that substantial economies may be effectuated by being operated as a single coordinated system confined in its operations to a single area or region in one or more states, not so large as to impair . . . the advantages of localized management, efficient operation and the effectiveness of regulation: *Provided*, that gas utility companies deriving natural gas from a common source of supply may be deemed to be included in a single area or region."

[7] Senate Committee on Interstate Commerce, Reports on Wheeler-Rayburn Bill (S. 2796), p. 11.

and this period may be extended for an additional year where necessary.

The procedure for accomplishing simplification is set forth in subsections (d), (e) and (f). It may involve application to the court for enforcement of the Commission's order, the court's appointment of a trustee (which may be the Commission), and the disposal of any or all assets of the companies as the court may prescribe, in accordance with a reorganization plan which may be proposed in the first instance by the Commission or by any person having a *bona fide* interest, after opportunity for a hearing has been granted.

In order to facilitate voluntary reorganizations, however, subsection (e) of Section 11 provides that at any time after January 1, 1936 any registered company or subsidiary thereof may submit to the Commission a plan of readjustment in compliance with the provisions of subsection (b). If the Commission approves a plan which cannot be effected without court proceedings, the Commission may, at the company's request, apply to a court for aid in carrying out the proposed reorganization. If the court approves the plan, it may enforce it through a trustee, which again may be the Commission.

Under subsection (f) the Commission shall have a voice in any other reorganization proceeding in the federal courts involving registered holding companies or their subsidiaries. The court may appoint the Commission as trustee and no reorganization plan may be effective without the Commission's approval.

Under subsection (g) it is unlawful for a person to solicit proxies, consents, or authorizations in connection with a reorganization plan unless the plan has been submitted to or proposed by the Commission and unless a copy of the Commission's report and comments on the plan (or an approved summary) are given to the security holders.

"This means that, although in many reorganizations, conducted in State courts or effected without judicial supervision, the Commission may not actively intervene, it will be given an opportunity to call to the attention of security holders what it deems to be the merits or demerits of the various plans involved."[8]

For purposes of analysis the main objectives of Section 11 may be restated as follows: (1) to require each utility holding company to limit its sphere of influence to a single operating territory subject to certain exceptions, and to such other businesses as are reasonably incidental or economically necessary to its utility operations; (2) to provide for the orderly simplification of complex holding company structures and for a more equitable distribution of voting power in their securities.

It will be recognized that these are separate and distinct objectives for it would have been possible to have required corporate simplification without eliminating the so-called non-integrated holding company.[9] Indeed, the reasons for desiring to limit the control of any holding company system to a single region are quite different from the reasons for eliminating undue corporate complexities.

Reasons for Requiring Partial Dismemberment of Holding Companies

Authoritative statements of the reasons for this fundamental objective of the Holding Company Act were given

[8] From an address by Commissioner George C. Mathews at Northwestern University on October 14, 1935.

[9] A non-integrated holding company, such as Electric Bond and Share Company, Standard Gas and Electric Company, Middle West Corporation, The North American Company, and Cities Service Company, controls utilities which do not constitute one continuous network in contiguous territory but are more or less scattered geographically.

by the National Power Policy Committee, President Roosevelt, Senator Wheeler, and by several of the Congressmen who most actively supported it. The major reason was the desire to diminish concentration of control in the electric and gas industries. The National Power Policy Committee specifically called attention to this condition and its implications in its report on public utility holding companies as follows:

"Numerous studies have already shown, and the report of the Federal Trade Commission further demonstrates, that the concentration of control in the electric and gas industries has assumed tremendous proportions. While the distribution of gas and electricity in any given community is tolerated as a 'natural monopoly' to avoid local duplication of plants, there is no justification for an extension of that idea of local monopoly to embrace the common control, by a few powerful interests, of utility plants scattered over many states and totally unconnected in operation. Such intensification of economic power beyond the point of proved economies not only is susceptible of grave abuse but is a form of private socialism inimical to the functioning of democratic institutions and the welfare of a free people."[10]

Both the Federal Trade Commission in its utility corporation reports and Dr. W. M. W. Splawn in his report to the House Committee on Interstate and Foreign Commerce expressed concern over the increasing concentration of control in the electric and gas utility industries. It has resulted from the extensive development of holding company systems controlling in some cases more than a billion dollars of assets and the use of pyramiding and other devices for concentrating control in few hands. The proponents of the Holding Company Act asserted that there were several actual or potential dangers in allowing this condition to continue. First, they objected to the economic and financial power involved in the centralized control of the business patronage of such a dominant part of these utility industries, on the ground that it tends to create a closed economic system.[11] The existence and exercise of this power were held to be of great significance to the investment bankers who distribute utility securities, to utility engineering and construction firms, to accounting concerns, and in fact to all businesses engaged in selling services or materials to the utility industry. Second, they maintained that state and federal regulation of the utility industry can succeed only if the power and scope of a holding company's influence are limited to a single operating territory. A third objection, which was directed particularly to the centralized control of far-flung operating systems, was the charge that absentee management has been substituted for local control to the detriment of local interests. Finally, the non-integrated holding company was opposed on the ground that it had impeded the movement toward a more economic grouping of local operating properties.

The first three reasons for the policy of dismemberment of the great utility holding companies were stated by President Roosevelt on March 12, 1935 in a message to Congress, transmitting the *Report* of the National Power Policy Committee. He said in part:

[10] Printed in Hearings before the House Committee on Interstate and Foreign Commerce, 74th Cong., 1st Sess. on H.R. 5423, Pt. 3, p. 2312.

[11] The expression "closed economic system" means a system substantially closed to independent competitive business. It implies a closed or specially favored circle of businesses dealing with the operating industry, resulting from the creation of affiliated engineering and construction firms, interlocking directorates, communities of interest, and similar special or privileged relationships which are obviously detrimental to free, competitive enterprise.

"But where the utility holding company does not perform a demonstrably useful and necessary function in the operating industry and is used simply as a means of financial control, it is idle to talk of the continuation of holding companies on the assumption that regulation can protect the public against them. Regulation has small chance of ultimate success against the kind of concentrated wealth and economic power which holding companies have shown the ability to acquire in the utility field. No Government effort can be expected to carry out effective, continuous, and intricate regulation of the kind of private empires within the Nation which the holding company device has proved capable of creating.

"Except where it is absolutely necessary to the continued functioning of a geographically integrated operating utility system, the utility holding company with its present powers must go. If we could remake our financial history in the light of experience, certainly we would have none of this holding company business. It is a device which does not belong to our American traditions of law and business. It is only a comparatively late innovation. It dates definitely from the same unfortunate period which marked the beginnings of a host of other laxities in our corporate law which have brought us to our present disgraceful condition of competitive charter-mongering between our States. And it offers too well-demonstrated temptation to and facility for abuse to be tolerated as a recognized business institution. That temptation and that facility are inherent in its very nature. It is a corporate invention which can give a few corporate insiders unwarranted and intolerable powers over other people's money. In its destruction of local control and its substitution of absentee management, it has built up in the public-utility field what has justly been called a system of private socialism which is inimical to the welfare of a free people.

"Most of us agree that we should take the control and the benefits of the essentially local operating utility industry out of a few financial centers and give back that control and those benefits to the localities which produce the business and create the wealth. We can properly favor economically independent business, which stands on its own feet and diffuses power and responsibility among the many, and frown upon those holding companies which, through interlocking directorates and other devices, have given tyrannical power and exclusive opportunity to a favored few. It is time to make an effort to reverse that process of the concentration of power which has made most American citizens, once traditionally independent owners of their own businesses, helplessly dependent for their daily bread upon the favor of a very few, who, by devices such as holding companies, have taken for themselves unwarranted economic power. I am against private socialism of concentrated private power as thoroughly as I am against governmental socialism. The one is equally as dangerous as the other; and destruction of private socialism is utterly essential to avoid governmental socialism."[12]

Neither the committee hearings nor the debates in Congress added materially to the substance of the President's statement outlining the reasons for eliminating the non-integrated holding company.

Comments on the Objectives of the Dismemberment Provision

As we have seen, two fundamental objectives underlie the requirement for dismemberment of the non-integrated utility holding company. The first is to break down the concentration of control over the electric and gas industries which, it is claimed, has gone far beyond the point of economic justification; the second is to promote the formation of strong regional operating systems. The writer believes that these are desirable objectives, although there is admittedly room for difference of opinion both as to the potential dangers and the continued economic advantages of the geographically diversified holding company in the utility field.

Historically, the holding company fulfilled a useful function in combining small operating utilities in the interest

[12] House Committee on Interstate and Foreign Commerce, Hearings on H.R. 5423, *op. cit.*, Pt. 3, pp. 2310-2311.

of collective financial strength and more efficient administration. The holding company has also been a valuable device for combining contiguous operating utilities into integrated systems, where existing laws or other obstacles prevented outright mergers. It is now well established, however, that regional power systems, large enough to enjoy diversified demand and the technological and business economies of large-scale operation, have little if anything to gain from central administration by a far-flung holding company system. Indeed, from the standpoint of economical operation, favorable public relations, effective regulation and industrial democracy, the ideal structure is the regional power system, operated and controlled as an independent entity.

Some of the holding companies, however, have small local subsidiaries in various parts of the country which cannot yet be physically interconnected with other properties. From an economic standpoint it might not be desirable to require the severance of such small properties from the control and support of a regulated holding company, which is competently managed. Yet there would be no other alternative under the present terms of Section 11. To be sure, since the Act provides for the continued functioning of service organizations operating in accordance with the rules and regulations of the Securities and Exchange Commission, no operating company need be deprived of technical and managerial supervision as a result of eliminating the non-integrated holding company. But this would be an incomplete substitute, inasmuch as it does not include the financial support that a holding company can offer to its smaller subsidiaries. This objection to Section 11 could be met by a relatively minor amendment granting the Commission power to permit temporarily the continued control by a holding company of small local properties that cannot be integrated economically with any other properties to form a system large enough to be financially independent.

There is an alternative method of liberalizing Section 11 which would permit a much more flexible administration of the dismemberment provision than is now possible. As previously stated, the Act provides that the Commission *shall* allow a holding company to control more than one integrated system on an affirmative finding that (1) each such additional system cannot be operated independently without loss of substantial economies; (2) all of such additional systems are located in a single state or in adjoining territory; and (3) the continued combination of such systems under the control of the one holding company is not so large as to impair the advantages of local management, efficient operation or the effectiveness of regulation. Since these conditions are not separable, the Commission's authority to allow a holding company to maintain control over more than two integrated utility systems will be limited in actual practice by the second condition. Yet if a holding company, seeking to retain control over several of its subsidiaries located in different states or regions, can satisfy the Commission with respect to the first and third conditions, it would be clearly uneconomic to require dismemberment simply because of a failure to meet the second requirement. For that reason it is recommended that Section 11 be amended by deleting the second proviso that "all of such additional systems are located in a single state or in adjoining states," thereby enlarging the discretionary power of the Commission in administer-

ing the dismemberment program.

The view that the great utility holding companies have to be broken down before they can be regulated successfully by the Federal Government was entirely a matter of opinion and conjecture. There surely can be no proof of any such proposition until regulation has been given a fair trial. Under the Public Utility Holding Company Act, the Securities and Exchange Commission has broad authority over all intercorporate transactions within a holding company system, over the issuance of securities and the acquisition of utility assets and securities. Indeed, this is such a carefully drawn statute and the regulatory powers of the Commission are so inclusive, that it is doubtful if there remains any "loophole" for a holding company or anyone connected with it to perpetrate practices likely to affect adversely the interests of investors or consumers. Moreover, there is a further check against malpractice by a holding company in that many of the state public service commissions have now been given statutory authority to regulate the intercorporate relations of operating companies with affiliates.[13] Since federal control applies primarily to the holding company end of transactions with operating subsidiaries and state control to the operating company end, the two sets of regulatory agencies can be of material assistance to each other in preventing the recurrence of past abuses.

The importance of the argument that non-integrated holding companies must be dismembered because they interfere with the development of more economically integrated operating systems is somewhat difficult to estimate on the basis of existing knowledge. In the course of its National Power Survey, the Federal Power Commission prepared a map showing, in colors and various cross-hatchings, the areas served by the operating electric subsidiaries of 57 holding companies, with a 58th color for other systems, as of September 1935. The map clearly shows the results of past competitive rivalry among different holding companies in the acquisition of operating companies. It is obvious from this map that many of the boundary lines between service areas could not have been determined by economic and technological considerations. For example, there are many instances where a holding company acquired an operating company with the intention of integrating its operations with those of another near-by system under its control only to be outbid on the intervening territory by some rival holding company. The result was that the first holding company remained in possession of an isolated bit of territory that could have been served more economically as part of another interconnected system. Progress has been made toward clearing up the worst instances of this sort through the medium of purchases and exchanges between systems, but on a large scale the entire map shows intermingling of interests and illogical boundaries. In a great many instances, even where ownership has not changed, the power companies have made contracts with each other for the economic supply of the territories as they exist. In fact, most of the systems in the country are now tied in with neighboring systems for the interchange of power.

Under Section 30 of the Public Utility

[13] Since 1930, 24 state commissions have received statutory authority in some degree over "affiliated" interests. See National Association of Railroad and Utilities Commissioners, *Report* of the Special Committee on Progress in Public Utility Regulation, 1936, pp. 13-16.

Holding Company Act, the Securities and Exchange Commission was directed to study problems of this character and to make recommendations as to "the type and size of geographically and economically integrated public utility systems which, having regard for the nature and character of the locality served, can best promote and harmonize the interests of the public, the investor and the consumer." As previously indicated, the Commission was also directed to make a study of the problem of eliminating undue complexities in holding company structures and the problem of confining the properties and business of each holding company "to those necessary and appropriate to the operations of an integrated public utility system." Since these studies involve difficult engineering and financial questions, the progress of work upon them will of necessity be slow, although they will doubtless be in an advanced stage by the time the constitutionality of the dismemberment provision has been determined.

Granting for the moment that practicable methods of voluntary compliance with the terms of the dismemberment provision can be worked out for any holding company system, there remains the question of the effects of this program upon operating companies and hence upon owners both of their securities and the securities of the holding companies. The case for or against compulsory "disintegration" of non-integrated holding companies turns on the answer to this question. The Committee of Public Utility Executives, under the Chairmanship of Mr. Philip H. Gadsden, held that "where the operating properties are set adrift as semi-autonomous bodies without concerted direction as constituents of a system, the securities which rest upon the maintenance of that system cannot retain their value."[14] This view was based on the assumed loss of advantages which holding companies offer to their operating subsidiaries, particularly as regards engineering and managerial services, improved credit facilities and lower cost of financing.

There was no intention or expectation on the part of proponents of the dismemberment proposal that operating companies would be denied the *bona fide* advantages of large-scale technical and financial administration. On this question Senator Wheeler, Mr. Corcoran, and others took the position (1) that the advantages of large-scale operations would be retained by the terms of Section 11, through the promotion of strong, regionally integrated, operating systems; (2) that there was express provision for creation of mutual servicing companies to serve a number of operating companies just as the holding company serves them now but on a mutual cost basis; (3) that there was no longer any sound reason why the operating companies could not finance their own requirements and that they did not need the holding company as an intermediary in the money market; and (4) that an operating company of reasonable size "can buy as good management as a holding company can afford to give it."[15]

These arguments are strengthened by consideration of the growth in size of electric operating companies. For, as pointed out by the Federal Trade Commission and others, the benefits arising from holding company control decrease and may vanish when operating companies grow to such size and have become so well established that their securities may be readily marketed on

[14] Senate Committee Hearings, *op. cit.*, p. 938.

[15] *Ibid.*, p. 218.

their own merits. Thus, as a result of the steady progress of the combination movement in the electric and gas utility industries and the growth in size of operating companies, the function of the holding company in helping to finance the operating companies has steadily declined in importance.

This is more readily apparent when the size of the principal operating companies in the industry is considered. The writer has made a study of the capitalization and operating revenues of 157 electric and gas companies operating in the United States as of the year 1934. Sixteen were gas companies and the remaining 141 were either wholly or principally electric companies or they performed a combination of services. The total capitalization and surplus of this small number of companies amounted to $13,403,000,000. The total electric gross revenues of the 141 companies having electric operations amounted to $1,539,000,000 which compared with total revenues from ultimate consumers in 1934 of $1,837,000,000 for the entire electric utility industry of the United States, including municipal establishments.[16] It is significant to note that the annual electric gross revenues of each of these companies was in excess of $2,000,000; about 50% of the companies had gross revenues ranging from $7,500,000 to $75,000,000; and the remainder fell between $2,000,000 and $7,500,000.

A distribution curve showing the capitalization of each of the 157 companies revealed that only one company had a capitalization of less than $10,000,000; only 7 companies had a capitalization of less than $20,000,000; and the remaining 150 companies ranged in size from $20,000,000 to $761,000,000. Of these, 53 companies were capitalized in excess of $75,000,000. Since such a preponderant part of the electric utility industry is represented by a relatively small group of operating companies, each of which is large enough to stand on its own feet financially, the holding company's function of supplying equity capital to the operating industry no longer has the same significance as formerly, except possibly with respect to a steadily declining number of companies. For this reason the natural evolution of the utility holding company should tend toward a gradual diminution of its functional relationships with its operating subsidiaries, until finally it has been transformed from a management concern to little more than an investment company.

Despite this development in the size and strength of operating companies, the holding companies have continued to monopolize the purchase of their common stocks. For example, in the entire list of 157 companies, less than 25 companies had common stocks outstanding in the hands of the general public. Therefore, the only way in which the public may invest in the equity securities of electric and gas operating companies, outside of this small group of independent enterprises, is through the medium of some holding company. Yet the equity securities of most utility holding companies have been notoriously and excessively speculative, for reasons which are familiar to most students of the subject. To be sure, one of the principal objectives of the Public Utility Holding Company Act is to improve the quality of the securities representing the equity investments in operating

[16] The two figures are not fully comparable since there are 15 wholesale power companies in the list of 141 companies which sell the bulk of their production to other companies. Nevertheless, after allowance is made for this difference, the remaining companies in the list of 141 represented between 75 and 80% of the private electric utility industry in the United States.

utilities, and it is anticipated that holding companies will be simpler and less speculative corporate enterprises after the readjustments called for by Section 11 have been made. Nevertheless, it would also be a distinctly economic and forward development if the major holding companies would allow the general public to purchase either part of the outstanding common stocks of their stronger operating subsidiaries, or such additional shares as may be issued in the future.

In summary, the writer believes that the main objective of lessening concentration of control in the electric and gas industries is in accord with sound economics and is likewise socially and politically desirable. The provision should be amended, however, for reasons which were stated, in order to give the Commission a more flexible standard for granting temporary exemptions from dismemberment.

Suggested Methods of Reorganization or Dissolution

Opponents of the so-called "death sentence" have uniformly insisted that wholesale dismemberment of holding companies cannot be accomplished without loss to investors. Since most of those who predicted such unwelcome results were by no means disinterested adversaries, their views were largely discounted by proponents of the measure; but the criticism has been made so frequently by utility executives and by men of wide financial experience that investors in securities of holding companies undoubtedly have come to believe that enforcement of this provision of the law will be most harmful to their interests. From the very nature of the problem it was not possible for government witnesses at the Congressional hearings on the Wheeler-Rayburn bill to do more than give a general outline of the possible methods of liquidation or reorganization. For, as Dr. W. M. W. Splawn explained to the House Committee on Interstate and Foreign Commerce:

> "You can lay down sound principles and safeguards and leave it to the people to work it out in line with those principles and with those safeguards, but so far as charting in advance all these various trades and transactions, there is nobody under heaven who can do that."[17]

In his testimony before the Senate Committee on Interstate Commerce, Mr. Corcoran outlined a number of possible methods of reorganizing existing holding companies, although he made no attempt, nor did anyone else, to suggest an orderly plan of liquidation or other application of Section 11 with reference to any particular system.[18] Among the methods that might be utilized are the following:

1. Exchange of Securities. Since many of the holding companies control some scattered properties which might more economically be included in some existing integrated operating system, it was suggested that there should be many opportunities for holding companies to arrange exchange transactions with one another. Undoubtedly deals of this sort, involving a minimum use of cash, could be accomplished under favorable circumstances, although it must be noted that every exchange requires two willing traders. Without special studies, it is difficult to determine the practicability of any widespread use of this method of rearranging utility systems. However, the holding companies themselves would have to be willing to take the initiative

[17] Hearings on H.R. 5423, Pt. 3, p. 2204.

[18] Hearings on S.1725, pp. 204-221. (Mr. Corcoran assisted Mr. Cohen in drafting the Wheeler-Rayburn bill.)

in such a program or at least be responsive to suggestions, for this is necessarily a voluntary method of readjustment.

2. Creation of New Holding Companies. Since most of the large systems have two or more unified groups of operating companies, it was suggested that new companies could be formed, each to control one integrated system. The holders of securities in the original holding company would then receive securities in the two or more new companies. This method of dissolution was used in breaking up the American Tobacco Company and the Reading Company under the anti-trust laws.

Under such an arrangement holders of common stocks would benefit somewhat at the expense of senior security holders who would be exchanging a claim against the whole property as a unit for separate claims against its individual parts. For example, if one of the new companies had financial difficulties, the senior security holders might lose all or part of their investments in that company but, if the other companies prospered, any excess earnings over fixed charges, etc., would belong to the common stockholders. If the original holding company had not been divided, no earnings would accrue to the common stock until all senior charges, etc., had been paid. This difficulty could be overcome by having senior obligations jointly guaranteed by all the new companies or by giving the holders some additional compensation to offset the slight disadvantage resulting from the exchange. Thus in the Reading dissolution, the bondholders were given new 4½% and 5% bonds in the two new companies in exchange for 4% bonds of the old company.

It is apparent that this method of compensating the senior security holders for subdividing their liens would be at the expense of the common shareholders to the extent of the aggregate increase in fixed and preferred charges. However, this disadvantage could be avoided wherever it is possible to retire the senior securities before subdividing the portfolio into new holding company systems.

3. Distribution of Various Investments to Existing Security Holders. Another method of complying with Section 11 would be the distribution of securities in the holding company's portfolio among its own security holders. This would necessitate the retirement of the senior securities of the holding company as the first step to pave the way for a pro rata distribution of the security holdings that are to be liquidated. If sufficient time were allowed, it should be possible in the majority of cases for a holding company to sell enough of its investments through investment banking channels to enable it to retire its senior securities. If this were done in a buoyant security market, there is no reason why it should involve sacrifice sales or losses to investors. Assuming no difficulty in retiring senior securities, there would still be the problem of distributing the security holdings. In a great many cases the investor would receive certificates for fractional shares of infinitesimal size in many properties for each share of parent company stock. While it is true that the security exchanges would provide a market for the purchase and sale of such fractional shares, it is certain that in many instances there would be a great deal of temporary confusion and expense before the various fractions could be reassembled.

4. Trusteeship of Assets. The use of the trustee device was suggested by Mr. Corcoran to meet the objection that

the other plans would either involve losses to investors or would be impracticable to work out on a voluntary basis in the time allowed. He described its use in the following words:

"Legally, the most difficult situation will be one where prior to the rights of the common stock in a holding company controlling several operating companies, there are general liens on all the holding company's assets. Preferred stock is, in effect, a general lien ahead of the common stock. Debentures and bonds are, in effect, a general lien ahead of the common stock. Those general liens usually extend over all the holding company's properties and cannot by their terms be separated and applied pro rata to separate portions of the holding company's assets. But with the help of a court of equity, . . . a holding company that wants to turn itself into an investment trust or wants to divide itself into separate regional properties, . . . can have those liens apportioned among the proposed divisions of itself.

"The holding company can convey its assets in as many parcels as would make up regional companies . . . with a catch-all for the outlying companies which fit nowhere. They could be conveyed to a trustee in five parcels, say. That trustee could then issue certificates of beneficial ownership carrying voting rights in the several regional companies, and under the terms of a trust agreement hold the securities for the benefit of all concerned.

"Under the direct authority of the so-called 'Reading Case,' decided in the United States Supreme Court in 1920, the Court could then, without in any way redistributing the respective rights in the property . . . and without in any way interfering with a right of a debenture holder to rank ahead of preferred stockholders and common stock, redistribute each lien over each of the five parcels as a substitute for a single general lien covering all the holding company's property."[19]

It will be seen that this method is simply a variation of the procedure discussed under method No. 2 and, like it, is designed to obviate the necessity of a forced liquidation of assets. However, the same observation that was previously made is applicable here—namely, that it would necessarily involve some sacrifice for the common shareholders. Moreover, in many instances use of this method would have to be postponed until present complexities in corporate and capital structures are eliminated.

5. Conversion to an Investment Company. The terms of the Act make it possible for any holding company to retain intact the ownership of all or most of its assets by becoming an investment company and giving up its holding company function. Under this method the Securities and Exchange Commission would have to be satisfied that each holding company had actually ceased to exercise any controlling influence over the management and policies of those companies which, under the terms of the law, must be separated from its control. Several means of accomplishing this result would be available, among which are (1) enfranchisement of operating companies' preferred stock, and (2) a combination of that method, together with the sale of part of the common stock in the holding company's portfolio, when market conditions are favorable.

Since most operating companies have nearly as much preferred stock outstanding as they have common stock, it should not be difficult to create a situation where the "holding" company would have only a minority vote in the affairs of the operating companies. It is important to note, however, that in most cases this would involve much more than conferring voting power on the preferred stock of operating subsidiaries, since the outstanding common shares, each carrying one vote, frequently have a relatively low stated or par value. For example, take the case of the Kansas Gas and Electric Com-

[19] Senate Hearings on S.1725, *op. cit.*, p. 212.

pany, one of the subsidiaries of the American Power and Light Co. On December 31, 1935 its capitalization consisted of bonds and debentures, $19,000,000; 7% voting preferred stock (62,618 shares), $6,261,800; 6% non-voting preferred stock (13,743 shares), $1,374,300; and no par common stock (600,000 shares), having a stated value of $6,000,000 or $10 a share. In this instance the common shares, representing substantially the same total stated investment as the voting preferred shares, had 10 times the voting power. One method of establishing a more equitable division of voting power in a case of this sort would be to call in the common shares and exchange one new share for several old shares.

Since this plan has the advantage of simplicity and would not require a wholesale liquidation of securities, which the industry most fears, the Securities and Exchange Commission should study its applicability to different holding company systems. An objection remains that it might frequently be doubtful whether or not the original holding company were actually in control of the operating companies, but in the course of time, if new equity securities of the operating companies were sold exclusively to the general public, elimination of holding company control of scattered operating companies might in some cases be realized with a minimum of disturbance to existing corporate organizations.

Comments on Methods of Dismemberment

An examination of the possible methods of liquidation and reorganization shows that they would involve types of business transactions already familiar to those who are versed in the art of corporation law and finance. Equally significant is the fact that the mechanics and terms of each plan of dismemberment would be supervised by the Securities and Exchange Commission and the courts. Needless to say, special studies of each holding company system will be required to determine what method or combination of methods will permit compliance with requirements of the law with a minimum of risk and disturbance to investors. Yet one fact stands out clearly—namely, that forced liquidation, involving the dumping of securities on a buyers' market, with attendant sacrifices of values, was never intended and should not only be entirely unnecessary, but in all probability would not be countenanced by the Commission.

The holding companies should be given every reasonable opportunity to conform voluntarily to the requirements of Section 11, for apparently it will be immeasurably easier to dismember most of the holding company systems on a voluntary basis than by compulsion. In this connection, it may be noted that the Commission is directed to resort to compulsion only *as soon as practicable* after January 1, 1938. Obviously, this qualification gives the Commission a very broad discretionary power which, having regard for the high caliber of the Commission and its intimate knowledge of corporate securities, should provide adequate safeguards for investors in holding company securities. It is extremely unlikely that the Commission will attempt to force a reorganization plan of its own upon any holding company system as long as that system is seriously endeavoring to work out the details of a voluntary plan and it is equally improbable that the Commission will require any method of dismemberment that may involve losses to investors in holding company securities.[20]

[20] To be sure, the investor cannot and should not be protected against losses from a decline of values which has already been incurred because holding com-

(*Footnote 20 continued on page 151*)

Any difficulties, uncertainties, and risks arising from enforcement of the terms of the law will largely depend upon the attitude of the holding companies themselves. If the constitutionality of the provision is upheld and the companies still continue to oppose dismemberment, the burden of devising appropriate methods of reorganization will ultimately fall upon the Commission, with the distinct possibility that each plan would result in protracted litigation. In such cases the Commission and the courts would probably have to resort to the legal machinery of trusteeship of holding company assets as the only practicable method of involuntary dismemberment. Even this would not necessitate the forced sale of securities, since the trustee could follow the legal principles and methods which were utilized in the Reading Company dissolution case under the Sherman Anti-Trust law.

One element of risk and uncertainty relates to the problem of raising new capital for operating companies if there should be protracted litigation in connection with enforcement of Section 11. This is important because the capital requirements of the electric and gas industries are increasing and are likely to be extremely heavy for the next few years. With their present capital structures, it would be very unwise for the great majority of operating companies to raise new capital mainly through sale of bonds or preferred stocks. Already the common stock equity in most operating companies is entirely too thin from the standpoint of safety and stability of return. This problem is ordinarily met by sale of common stocks of operating companies to their holding companies, which usually involves sale of holding company securities to the general public. An alternative method, which would be most desirable in the case of many operating companies, as previously suggested, would be the sale of new common stock to the general public. This would hasten the transition of holding companies from the status of management companies to that of investment companies, which would be both a logical and an economically desirable development in so far as their relation to the larger operating companies is concerned. However, it is difficult, if not impossible, to predict the problems which may arise in financing the requirements of operating utility companies, if the holding companies affected by the terms of Section 11 do not cooperate with the Securities and Exchange Commission in working out the details of dismemberment. Since the majority of companies will probably not cooperate as long as there is any doubt as to the constitutionality of the provision for dismemberment, an early Supreme Court decision on this issue is greatly to be desired.

Conclusions

The fundamental objectives of the requirement for geographical simplification of utility holding companies are for the most part economically sound and socially desirable. Where, however, a holding company can demonstrate to the satisfaction of the Securities and Exchange Commission that the severance of control over any of its operating subsidiaries, wherever located, would result in substantial loss of economies and that continued control would not block an economically desirable merger of adjoining properties, the Commission

(*Footnote 20 continued from page 150*)
panies acquired operating company securities at inflated values or wrote them up in anticipation of excessive earnings from dividends or profit-yielding service charges, no longer possible under effective regulation. Such losses must be charged to mistaken policies of the past, not to readjustments of the present or future.

should be empowered to grant a temporary exemption from the dismemberment requirement. As it now stands, Section 11 b (1) is unnecessarily extreme and its amendment in order to permit this type of exception should remove all legitimate grounds for opposition by the industry to the reorganization program and might thereby encourage a spirit of cooperation between the companies and the Commission to achieve the major objectives of the section.

Even without amendment, however, there is no basis for the fear that Section 11 will jeopardize the interests of investors, nor for the belief that the Commission will initiate a wholesale program of compulsory disintegration of holding company systems in 1938. Since the Commission does not have to take the initiative until it is *practicable* to do so, a reasonable expectation is that the companies will be given ample opportunity for voluntary compliance. In the meantime, the Commission can direct its staff to make the engineering and financial studies called for by Sections 11 (a) and 30, which will provide it with the necessary data for positive action, should it be necessary finally to resort to compulsion in any particular instance.

Land Use Readjustments in the Northern Great Plains

By SHERMAN E. JOHNSON*

The Need for a Re-inventory of Resources

As one travels westward from the eastern Dakotas and Nebraska one observes a gradual change in the use of land. At the starting point the farms center around the quarter-section homestead size, and all, or nearly all, the native sod has been replaced by crops or tame pasture. Farther west, patches of native sod begin to appear and they grow proportionately larger until, as the areas of rougher topography in the western part of these states are reached, the land is predominantly used as native pasture with only a minor percentage devoted to crops.

The decrease in percentage of land in cultivated crops from east to west represents to a considerable extent the farmer's attempt to adapt himself to differences in environment. Less emphasis on crops and more emphasis on a type of live stock production which can utilize native grass is undoubtedly a logical and sound adaptation to differences in physical and economic conditions. However, the adjustment to date is a very imperfect one. In the zeal for westward expansion, which was encouraged by the homestead laws, and by a conjuncture of years with abnormally high rainfall and years with high prices, the need for adapting the use of land to differences in environment was often forgotten. In the favorable price and rainfall years, land not actually too rough or too stony for cultivation was broken for crops regardless of its long-term prospects.

Some 15 to 20 years of experience in farming such land, recently during dry seasons and low prices, furnishes a background for a re-evaluation of this region in terms of land uses to which it is best adapted from a long-term standpoint. To conclude, for instance, that because of our experience during the recent dry cycle, all land west of the James River in the Dakotas is suited only for a grazing use would undoubtedly be as inaccurate as the previous assumption that all this region that could be plowed was suited for crop production.

The Transition Zones

Broadly speaking, as one travels westward, there is an east to west transition from land that should stay in crop production to land that is definitely unsuited for such use, but it is by no means possible to draw a north and south line west of which crop farming should not be undertaken. There are tremendous differences in soil and rainfall within short distances which result in many smaller areas of good crop land being intermingled with land unsuited for cultivation. In these smaller areas probably a considerable percentage of the land can permanently remain in crop production, but a larger percentage than at present should be devoted to permanent pasture to support supplementary live stock enterprises.[1]

Farming experience and preliminary research studies have indicated some areas in the Northern Great Plains Region which may be termed "transition zones" between land where probably a considerable percentage should

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[1] It is, of course, also recognized that the extensive margin of cultivation will shift with price changes.

remain in crop production and land so poor that no one has attempted to farm it. In such areas there is always the chance of producing one or two bumper crops of wheat in a 10-year period, but the intervening years of short crops and failures bring a chain of feed and seed loans, Red Cross and relief aid, tax delinquency, and soil exploitation.

Transition Zones Have Not Been Self-Supporting. The higher risk crop farming areas in this region probably never were self-supporting communities. It is doubtful that they have produced a return over a period of years which would pay for purchased resources at prevailing prices, adequately support the farm families, and maintain the public and private institutions which farmers require in order to continue living in the area. Homesteaders usually had some ready cash when they filed on their claims. This was used for making the initial improvements, for equipment, and for living expenses until some income could be obtained from the land. During the rapid settlement of the country such expenditures created employment opportunities for those who came to the area without funds. Towns were built to serve the new settlers, and thus a settlement boom or prosperity period developed—generated largely by investment of capital brought in by the settlers.

Often as soon as title to the land was transferred to the settler, he would mortgage it to some individual or firm in the older sections in order to obtain funds for more equipment and more adequate buildings. If the title was received following a series of high rainfall years, mortgage loans were easily obtained, with the result that another prosperity period was generated, again financed by outside capital. Farm equipment companies also contributed to such booms by selling machinery on small initial payments.

When good crop years coincided with high prices and also with the influx of outside capital, the inhabitants usually decided that they had discovered a new corn belt or a new Red River valley. Consequently, states, counties, and school districts sold bonds for public improvements which could only be serviced and liquidated with agricultural production comparable to that of the old corn belt.

When the inevitable dry seasons came, fixed charges on public and private indebtedness could not be met. Most often the reserves were inadequate even for maintenance of farm operations, and for family living, with the result that Congress received appeals to grant seed and feed loans. Frequently, the Red Cross and local relief agencies were called upon to deal with the human needs in the emergency. In the more recent drought period federal relief, rehabilitation and seed loans have supplanted other relief and credit agencies. Thus, outside capital—furnished largely by the Government—has supported these communities during drought and depression. The prosperity periods which they have experienced also have been generated largely by outside capital, and it probably is too much to expect that occasional bumper crop years can repay such outside investments and restore these communities to a self-supporting basis. Very often the stimulus of the virgin soil is gone, and wind erosion has become an ever-increasing problem. As a consequence, even some of the good crop years experienced in the past will probably not be repeated.

"Checker-Board" Ownership. Attempts to farm the transition zones have resulted in the creation of a "new public

domain" interspersed with the privately owned land and creating what has been termed a "checker-board" ownership pattern. Title to much of the privately owned land has been taken by the counties for delinquent taxes, or by the public agencies which made loans on it. More than half the land in some counties is now subject to tax deed or has been foreclosed upon by public lending agencies. A large part of the land still remaining in private ownership is in the hands of absentee owners. Many of these are the original homesteaders who tried to make a living in the area and failed. They are holding the land in the hope of salvaging a portion of their investment.

As crop production is abandoned in such areas, and the land either reverts to the "new public domain" or is held in absentee ownership, control of its use is usually assumed by the remaining live stock ranchers. The customary practice is that of leasing the tracts of public land or absentee-owned land which are strategically located with respect to water, or other means of controlling as large an amount of surrounding land as possible. Very often an artificially high lease price is established for the key tracts and the remaining land cannot be rented at all.

The rancher who assumes control in this manner is forced to overgraze the land, as otherwise such range would attract other ranchers, who would outbid him for the key tracts in the next lease period. The result of this practice is a very unstable tenure situation for the rancher, and a gradual loss to him as well as to society because of destruction of the range.

Federal Purchase Projects

The land purchase projects in the Northern Great Plains Region were originally planned by the Land Policy Section of the AAA as an experimental attack on the problem in the transition zones. They involve purchases varying from the land farmed by sporadic settlers in areas locally recognized as strictly ranching, to purchases in communities at one time closely settled, but where experience has proved the land totally unsuited for crop farming.

The central aim in organizing these projects has been to effect readjustments in land use which will establish a better balance between population and resources; and at the same time increase the long-term productivity of the resources. The adjustments involved are: (1) the purchase by the Government on a voluntary basis of the land unsuited for farming; (2) resettlement elsewhere of the settlers who have been unable to adapt their farming to existing conditions; (3) development of the area to make it more productive in its new use (which will be largely grazing); (4) organization of administration for the land purchased which will guard against overgrazing, but, nevertheless, permit its use as a supplement to the land remaining in private ownership. Such administration would give the families remaining in the area increased resources to work with, and thus make it possible for them to become self-supporting.

If these adjustments can be carried out, they should result in greater stability of income for the individuals who remain in the area. Since the land would be shifted to its best permanent use, the adjustments should also result in a greater long-term net income for the area. Society would also benefit through conservation of the natural resources. Those who have failed to make a living in the area would have opportunities to relocate where their special abilities could be used more effectively.

It should be fully recognized that the projects which have been established can only serve as experiments or trials, and perhaps as demonstrations, of what appear to be desirable adjustments in land use. Federal ownership of land of this type for purposes of control and conservation is a new departure. For this reason, projects involving the shifting of poor dry-farming land to grazing and other uses are experiments in tenure as well as in land-use adjustments. By establishing the national forests, we recognized that only through public ownership of some of our forest land could we conserve and maintain adequate forest resources. We have a somewhat analogous problem in the poorer dry-farming areas, in that the lure of a good crop in an occasional year leads to destruction of the greatest resource of this region—grass; consequently, to destruction of the top soil by wind erosion; and then to public support of the inhabitants. Certainly uncontrolled private ownership has proved disastrous, both for the owners and for society. Wholesale foreclosure and tax delinquency have nearly bankrupted local government and created a "new public domain" which, in the hands of counties and states with no organization for land administration, is just as badly exploited as under private ownership. In the transition zones a method of land control needs to be developed which will close the gates against such exploitation of human and natural resources. The low land investment required, and the ease with which such land can again be brought into production are factors conducive to a repetition of past mistakes following some favorable yield and price years.

It is probable, however, that federal ownership of all land in these transition zones will not prove the best solution to the problem. Some of its disadvantages will be discussed later. Nevertheless, if a successful method of blocking out administrative units and of controlling the use of such land can be worked out on the federal projects, it is possible that it can later be applied to state and county land, or even to land in private ownership.

Difficulties Encountered. The two years of effort already expended in organizing federal land purchase projects in the transition zones of the Northern Great Plains have proved that this is by no means an easy task. Strangely enough, some of the difficulties which were anticipated before the present purchase program was started did not materialize, or turned out to be of minor significance, but plenty of unforeseen obstacles arose to take their places. One of the anticipated difficulties which materialized only to a minor extent was opposition from local towns and trading centers. The land purchase program got under way in the Northern Great Plains during the extreme drought year of 1934, and following about five years of drought and low prices. Both farmers and business men in the areas definitely unsuited for farming had become convinced by that time that crop farming would not succeed. When over half of the land in a county has become subject to tax deed, and when about half of the rural population is supported by federal relief grants, it is not so difficult to arrive at the conclusion that some permanent land use adjustment is needed. Favorable local public opinion is, of course, necessary for the success of a voluntary land purchase program. Very often this was assured by petitions to start the project which were signed by farmers, business men, county commissioners, and others.

The statement is often repeated that

farmers have a sentimental attachment to their homes which makes them reluctant to part ownership with even a worthless farm, at least at the low prices offered by the Government. While this may be true in other regions, it was found that farmers in the transition zones of the Northern Great Plains were more than willing to sell their lands even at the low price of $1 to $3 per acre, provided they had any assurance at all that they would have other opportunities elsewhere. This attitude can probably be accounted for by the fact that most settlers in the Great Plains areas have not lived there all their lives; also the hardship connected with years of crop failure is not as a rule conducive to developing sentimental attachments to the farm.

The predominant reason given for not selling immediately following the Government appraisal was lack of opportunity for resettlement. Frequently the land is encumbered so that the owner retains only a small part of the low price which is paid. Sometimes the resident operator is a tenant and, therefore, gets nothing from the sale of the land. Consequently, some assistance in resettlement is necessary if such resident operators are to move out of the area. A few families, to be sure, are fortunate enough to have connections elsewhere, or can salvage sufficient funds to finance their own resettlement. But many people in such circumstances had moved out before the purchase program was started. It is not uncommon, therefore, to find in a purchase area a preponderance of older people who have no alternatives elsewhere, or younger families who have become stranded for other reasons.

The writer has been too close to the problem to be unaware of the major obstacles to the development of a rural resettlement program. He believes that some of these obstacles are so great that under some conditions the best alternative lies in letting the families stay on the land after federal purchase, by means of lease or license agreements, until they are in a position to move elsewhere of their own accord. In the more humid sections of the country, probably a life tenure reservation is the best solution. Even in the Great Plains areas there is the possibility of an occasional bumper crop for the man who stays, but this does not enable him to tide over the drought years, so at best it is a forlorn hope, and at present the Government is financing the gamble. It would seem possible to filter into the better farming areas (especially on the irrigated lands of the region) a small number of the more capable farmers from the purchase projects. The destitute older people and the incapacitated must be cared for by some Government agency no matter where they live. It is probable that to support them in their present locations—far from towns and without even opportunity to grow a garden—is more expensive than to care for them elsewhere. Probably some means of assistance could be developed which would enable them to obtain "retirement homes" where they could at least earn a part of their own living.

Another consideration is the effect of a land purchase project on public institutions, and on the local tax structure. This deserves careful study by someone trained in public finance. Very often the project can be so organized that federal purchases will make possible the closing of certain schools and roads, and thus effect actual savings in public expenditures. Sometimes it is forgotten that most of the land has not paid taxes in recent years, and that, therefore, private ownership has been a liability

to the larger community because of the need for maintaining schools and roads in the area. Outstanding indebtedness of taxing units is likely seriously to complicate the problem of adjustment. Sometimes such indebtedness can be met by using the receipts from delinquent taxes which are paid out of the purchase price of the land. Otherwise, it remains as a charge against the smaller tax base.

Delay in title clearance after the options to the Government have been accepted is a menace to the success of the land purchase program. Part of this delay results from the antiquated system of title records and land transfers in use, and part from the insistence of the Government that land worth $2 per acre must have just as flawless a title as land worth $2 per square foot. In the meantime, mortgage interest and taxes accumulate against the land and the owner loses much of the small equity he once had.

No matter how favorably a federal land purchase program is received, there are always some owners who refuse to sell under a voluntary program.[2] This hinders blocking out the area for economical administration. However, if a long-term purchase program can be envisioned, it is altogether likely that most of the land which should be purchased can be secured at some later time.

Administration of Land Purchase Projects. One of the chief problems to be faced in the land purchase program of this region is to organize an administration for the proper control and use of the land. In some other sections of the country the land purchased under the federal program can be turned over by a lease arrangement to some state or federal agency already familiar with the problems of administering such land, but in this region there is no background of experience for organizing the administration of land which has once been in a settled community.

It involves much more than a simple shift for the whole area from crop production to grazing. There are always lands most suitable for winter headquarters of ranchers, including creek bottoms where winter feed is produced —either with or without irrigation. Often there are adjoining irrigation projects where a part of the winter feed for the range live stock is grown. Some dry land farms may be of such quality that they can continue in production on a self-supporting basis. Other dry land farms could be made self-supporting if the operators could obtain grazing privileges on the land which is purchased, and by that means establish a supplementary live stock enterprise. Careful consideration must be given to the balance between irrigated land, dry farming land, and range land. The first two furnish the winter feed base to supplement the range.

Shifting the major use of a large amount of the land also involves changes in the community pattern. Without careful planning this may result in greater rather than less scatter of population, and in a higher rather than lower cost per capita for social institutions; whereas a properly planned readjustment should make possible a greater concentration of ranch and farm headquarters and effect savings in operation of roads, schools, churches, etc.

The problem is, therefore, much broader than purely grazing administration. It is essentially a problem in land use readjustment which involves

[2] The policy of a uniform price to all sellers for the same quality of land has been wisely adhered to. In this way the owner who optioned his land early in the program received the same price as the one who thought he would hold for a higher price.

also an adjustment in type of farming and a rearrangement in the community pattern. All the interrelated elements must be considered in planning such readjustment. Since each project is selected as an experiment in coping with a particular type of problem, the administration must be sufficiently flexible to meet the special conditions of this community. However, certain general principles in land administration can be set up and adhered to. These should be such as will adequately conserve the resources of the area, and otherwise protect society, at the same time that they give the user of the land an equitable share of grazing privileges, along with stability of tenure and protection of the range.

The problem of administration is complicated by the fact that even when the purchase program is completed there will be some land within the area in private ownership (largely used as ranch and farm headquarters). Operators within and adjacent to the purchase area naturally will have an accessibility advantage over other operators in the use of the public land. They will also be more dependent upon it for a part of their productive resources. Fears have been expressed that this advantage and dependence will become crystallized into a "vested right" in the public land.

The advantage resulting from the use of public land can be minimized by establishing land charges which approximate the productivity rental value of similar land. Such land charges could be varied from year to year in accordance with market prices for cattle and sheep. They would, of course, also be based on range carrying capacity rather than on surface acres.

Charging what would approach the full economic rent for similar land would prevent a subsidy of low land charges accruing to those within or adjacent to the purchase area. However, two of the primary purposes of the adjustment are to establish security of tenure on grazing land, and to prevent overgrazing by instituting adequate control of the range. If these two purposes are accomplished, they will result in definite advantages accruing to those operators who are in a position to use the public land. The Government cannot prevent capitalization of such advantages and be consistent in an attempt to secure greater stability of income and greater security for farm and ranch operators.

Since it is not possible under a voluntary program to purchase all nonresident, privately owned land which should be diverted to a grazing use, some special procedure is needed for bringing such land under organized control. Some experience with cooperative grazing associations, especially in Montana, indicates that probably the best means of handling such land would be for cooperative associations of live stock producers to lease it and use it under the same regulations as the public land.[3] Such associations could also lease state and county owned land. They would at the same time serve as an organized contact between the stockmen and the Government representatives.

Alternatives to Federal Land Purchase and Ownership

The possibility of cooperative live stock grazing associations leasing state, county and privately owned land to be used with the federal land on purchase projects suggests an alternative to fed-

[3] Tootell, R. B., "Grazing Districts, Their Nature and Possibilities in Range Land Utilization," *Montana Extension Service Bulletin* 127. Also Saunderson, M. H., and Monte, N. W., "Grazing Districts in Montana: Their Purpose and Organization Procedure," *Montana Experiment Station Bulletin* 326.

eral purchase of extensive areas of land. Cooperative grazing associations might be developed which would purchase the non-resident privately owned land, and lease—or even purchase—the state and county owned land. They might eventually conceivably purchase the federal land. This may prove to be a final solution to the problem of providing security of tenure on the range without establishing vested rights on public land.

If ownership of the land by cooperative grazing associations is an alternative to Government ownership, the question may be raised, why not concentrate on that method in the first instance? The answer is: first, because the advantages of security of tenure and prevention of overgrazing need to be worked out and demonstrated before cooperative associations can afford to invest in the venture; and, second, because the tangle of ownership and occupancy is at present so intricate that a small and newly organized grazing association would not be able to cope with it until the ownership pattern had been simplified, and a better background of organization and administration established. It is no small task to contact and bargain with six or seven hundred owners who may have an interest in the creation of one association. It seems probable, therefore, that even if the advantages of grazing association administration of land are well demonstrated, some type of public assistance will be needed to give initial impetus to the movement.

It has been suggested that the Federal Government purchase isolated tracts of land from individuals who cannot succeed in the higher risk areas, and then lease or resell these tracts to operators who wish to remain. The intended result would be farms or ranches sufficiently large to enable those who remain on them to become self-sustaining. This approach deserves further consideration, but one difficulty is that, unless care is exercised in such purchases, the resulting community pattern will need more public institutions than the productivity of the land will support. Hence the remaining operators will not be able to hold the land in private ownership. Another difficulty is the high cost of administration which is involved in such a program. Scattered purchases to form nuclei for the organization of grazing associations might have considerable merit. Such a program should not be instituted, however, without previously determining its place in a long-term adjustment program for the area.

Research as a Basis for Readjustment Programs. It is apparent from the foregoing discussion that the background of facts and principles needed for an adjustment program in this region is not adequate to permit forecasting with any degree of certainty the results from any line of action. The federal land purchase program should be recognized as an experimental approach. Along with such an experiment we need to study the whole question of the type of tenure most suitable for the region. In other parts of this country the operator-owned family farm has been held up as an ideal. It is obvious that, if family farms are to be established on a permanent basis in the Great Plains Region, the acreage per unit has to be many times the average size of Corn Belt farms. Even in the better areas where crop farming could sustain itself over a 10-year period the family farm lacks the reserves needed to tide over the inevitable crop failure years. In the transition zones, perhaps public or common ownership of grazing land and private ownership of headquarters in sheltered locations will prove more satisfactory.

Studies should be made of experiments in tenure adjustments on this type of land, both in this country and abroad.

We need to establish more definite criteria for determining whether or not certain areas should remain in crop farming from a long-term standpoint. Some method of land classification based on soil surveys, on weather data, and on crop yield information should be developed for this purpose.[4] Historical studies should be undertaken to determine whether specific areas have been self-supporting over a period of years. Estimates based on crop yield expectancy and projected prices could then be made, which would indicate whether such areas could expect to maintain themselves in crop farming.

A whole series of problems which need to be studied are found on both sides of what have here been termed transtition zones. The problems of range control and overgrazing are found even on the land devoted entirely to grazing. However, the most important problems seem to lie on the crop farming side of the transition zones. Many areas where a large proportion of the land can remain in crop production have an even lower ratio of resources to population than the transition zones. Too intensive farming has been attempted, and when readjustment to more extensive types becomes necessary, there must either be a decrease in the number of farmers or all will be faced with reduced incomes and idle labor capacity.[5]

Credit policies of quasi-public institutions should be studied to determine how they can be best adapted to serve the needs of this region. Injudicious extension of credit can nullify the effect of other attempts at adjustment. On the other hand, they can be so integrated with other programs that they will materially hasten the desirable adjustments.

A positive attack is needed on the problem of controlling or disposing of the "new public domain"—the land subject to tax deed and the land foreclosed upon by public lending agencies. Some of this land can probably go back into private ownership in small parcels, but a careful classification should be made before such sale to prevent repetition of past mistakes in use. Probably some means of exchange can be developed for blocking out holdings of the poorer lands, and thus making administration and control more feasible. The state is likely to prove a better administrative unit than the counties, but even state agencies have much to learn before they can develop efficient administration of such lands.

Zoning against improper uses of land in the future has been much discussed in recent years. This approach is undoubtedly deserving of much more careful study to determine its adaptability for this region. It should be pointed out, however, that zoning grazing areas against crop production means a distinction between two agricultural uses of land. Moreover, often some dry land must be used to produce winter feed for live stock, even in areas otherwise unsuited for farming. To permit this and still prevent cash crop production by means of a zoning ordinance may be a difficult undertaking.[6]

[4] Several Great Plains agricultural colleges have experimented with the land classification approach. Probably the most useful classification for the purpose indicated above is the one developed by the Montana Agricultural Experiment Station. There is need, however, for comparing this approach with the work that has been done in North Dakota and elsewhere in an attempt to establish a uniform classification.

[5] The Soil Conservation Service has been confronted with this dilemma in the wind erosion areas. To control wind erosion a more extensive type of farming must be instituted, but this means a lower income to the operators unless some farmers move out of the area.

[6] Mr. Harry A. Steele, Resettlement Administration,

(*Footnote 6 continued on page 162*)

Conclusions

The many maladjustments in land use in the Northern Great Plains are partly the result of continuing an outmoded homestead policy which encouraged settlement of land unsuited to crop farming. Large groups of farmers thus became stranded in the transition zones, and the major problem is now one of readjusting the resources of the area to support this population or encouraging and assisting them to seek opportunities elsewhere.

At present the Government is paying for its share of the past mistakes by supporting the stranded population with grants of emergency funds. The total of feed and seed loans and relief aid poured into some counties since 1929 has exceeded the purchase value of the dry-farming land. More positive and more permanent approaches to the problems involved are likely to prove less expensive and more in accord with national welfare.

A positive program, based on adequate research, should delineate the transition zones—areas where major adjustments are needed. In such areas experiments with Government purchase of land, and grazing association development, should be continued.

A program providing for security of tenure and for range control should be developed for the areas definitely recognized as range land. Considerable effort should be concentrated on working out adjustments in areas where a large proportion of the land should remain in crop production, but where more of it should be devoted to permanent pasture. Such adjustment means less intensive farming and perhaps fewer farmers. Further study will probably indicate that some of the poorest land even in these areas should be organized as grazing units.

Another drought and crop failure in 1936 again bring emergency problems to the forefront. For the time being there is probably no real alternative to a continuation of temporary relief for the stranded inhabitants. It might be possible, however, to grant it for work which would increase the long-term productivity of the area. Such work would be confined to improvements which will be permanently needed after the required land use adjustments have taken place. Federal land purchases have no place in an emergency program except as they are confined to areas where, as a part of a well formulated plan, they can form the nucleus of major use readjustments. A study of the types of land tenure best suited for this region should receive major attention, even in the emergency, in order that sound long-term adjustments may be initiated as soon as possible.

(*Footnote 6 continued from page 161*)

Lincoln, Nebraska, has devoted considerable time to studying problems involved in land zoning in the Great Plains. Dr. C. I. Hendrickson, Division of Land Economics, Bureau of Agricultural Economics, points out that if zoning could be developed it would make absentee owners aware of the unsuitability of their holdings for crop production, and, therefore, probably hasten the adjustment. It might be feasible to institute zoning of land within the boundaries of the grazing districts which are organized by cooperative grazing associations.

Emergence of Contract Motor Carrier Regulation

By JOHN J. GEORGE*

PRIOR to 1932 the chief problem in controlling contract motor carriers was to distinguish them *in law* from common carriers, and to devise a system of regulation appropriate to their status. After much trial and error in California, Michigan, and Florida between 1926 and 1930, Texas in 1931 arrived at a regulatory distinction between the two types which received the approval of the United States Supreme Court.

Abandoning the effort to require contract carriers to obtain certificates of public convenience and necessity long exacted of common carriers, the Texas legislation required the contract applicant to obtain a permit for his operation. Discretion to deny the permit was conferred on the commission to be exercised according to the effects which authorization of the additional service would have on existing carriers. The United States Supreme Court sustained the act on the ground of state power to conserve its highways.[1]

Since 1932[2] the regulatory problem has centered largely around distinguishing in *actual practice* between common and contract carriers.

No unwarranted interference with private business results from the Michigan requirement that private carriers obtain the permit and conform to the rules and regulations of the state commission.[3] Nor does a Colorado statute regarding private motor carriers violate due process by compelling private carriers to become common carriers[4]. Neither the 1931 motor carrier act of Georgia nor the motor common carrier act of the same state and date attempts to convert contract carriers into common carriers; similar regulations may be imposed in some instances on the two types of carrier without destroying the validity of the regulation.[5]

The state is constitutionally authorized to regulate contract carriers, held the Maryland Court of Appeals.[6] State regulation of the rates, service, and practices of private carriers for the purpose of preventing unfair competition with common carriers does not violate the right of such carriers to contract, according to another federal district court.[7]

Louisiana represents those jurisdictions in which the regulatory power has not been extended to any activity of contract carriers.[8]

The first problem confronting state legislatures was to establish an appropriate and legally valid classification of motor carriers whereby contract carriers could be distinguished from common carriers on the one hand and

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[1] *Stephenson v. Binford*, 287 U.S. 251; 77 L.Ed. 288; 53 S.Ct. 181 (1932).

[2] State control of contract carriers from the beginning to early 1933 is presented in the writer's "Public Control of Contract Motor Carriers," 9 *Journal of Land & Public Utility Economics* 233-46 (August, 1933).

[3] *Ogden & Moffett v. Mich. Pub. Util. Com.*, 58 Fed. (2nd) 832; P.U.R. 1933 A 220 (1931).

[4] *Bushnell v. People*, 92 Colo. 174; 19 Pac. (2nd) 197 (1933).

[5] *McEntyre v. Pub. Serv. Com.*, 176 Ga. 398; 168 S.E. 246 (1933).

[6] *Partlett Cooperative v. Tidewater Lines*, 164 Md. 405; 165 Atl. 313 (1933).

[7] *Baker v. Glenn*, 2 Fed. Supp. 880 (1933).

[8] *La. Pub. Serv. Com. v. David Reed*, 6 P.U.R. (N.S.) 497 (1934).

from private carriers on the other. Once this classification was established, the second problem emerged—namely, to devise valid special regulations for contract carriers which would reach the intended regulatory goals.

I. Classification of Motor Carriers and Imposition of Special Regulations

For the purpose of regulation the Legislature of Washington has validly classified motor carrier vehicles on the basis of the frequency and character of the use of the highways by the various types of operator as follows: (1) "certified carriers" [common carriers]; (2) "contract haulers," i.e., those who own, control, operate, or manage any motor vehicle used in the business of transporting property for compensation other than as a common carrier on a highway between fixed points or over a regular route; (3) "for-hire carriers," a classification consisting of those motor vehicles used exclusively for paid transporting of agricultural, horticultural, dairy, or other farm products from point of production to market.[9]

In the earlier stages of regulation, contract carriers insisted that they were in a different class from common carriers, and they finally established the validity of their contention in *Frost* v. *Railroad Commission of California*[10] and *Smith* v. *Cahoon*.[11] Since then occasional complaint has been registered that particular state regulations applied to common carriers were by that fact invalid as applied to contract carriers. A recent example is found in Oregon, whose supreme court said that imposition on contract carriers of particular duties, obligations, and burdens usually imposed on common carriers constitutes no violation of due process in the extent to which the regulatory act controls contract carriers.[12] Alleged favoring of common carriers as denying equal protection to contract carriers failed (as did five other charges) to invalidate state regulation of contract carriers in Oklahoma.[13]

But the burden of contract carrier complaints has become that equal protection is denied them by statutory treatment accorded to such operators as owner-shippers, agricultural haulers, and school busses. Declaration that exemption of "shipper-owners" from some of the Texas regulations applied to contract carriers does not deny equal protection to the latter, the Court stated in *Stephenson* v. *Binford*.[14]

Exempting owner-carriers from the Michigan requirement that contract carriers get permits from the commission constitutes no arbitrary classification.[15] Similar exemption of motor vehicles operated on rural mail routes, carriers transporting school pupils, and carriers hauling agricultural products does not invalidate the Oregon act regulating contract carriers.[16]

No unconstitutional discrimination is set up against contract carriers by a statute regulating them but which withholds its provisions from vehicles of specified size, and vehicles used to transport agricultural produce.[17] Farmers' transportation can be validly exempted from a statute controlling contract carriers.[18] That equal protection is not denied contract carriers by exempting

[9] Laws of Washington, 1933, c. 166; *State ex rel Scott v. Superior County*, 24 Pac. (2nd) 87; 4 P.U.R. (N.S.) 104 (1933).

[10] 271 U.S. 583; 70 L.Ed. 1101; 46 S.Ct. 605 (1926).

[11] 283 U.S. 553; 75 L.Ed. 1264; 51 S.Ct. 582 (1931).

[12] *Anderson v. Thomas*, 26 Pac. 60; 2 P.U.R. (N.S.) 193 (1933).

[13] *Deppman v. Murray*, 5 Fed. Supp. 661 (1934).

[14] Note 1, *supra*.

[15] Note 3, *supra*.

[16] Note 12, *supra*.

[17] Note 7, *supra*.

[18] Note 4, *supra*.

private carriers hauling primarily dairy, agricultural, and lumber products was authoritatively established by the Supreme Court in 1933.[19]

Favoring "private carriers," "for hire carriers," and those operating exclusively within municipalities has been held valid by a federal district court despite the protests of contract carriers made subject to the regulations relating to liability insurance, exaction of specified license fees, and filing of transportation contracts with the commission.[20]

But where the statute seeks to protect the highway, and to promote public safety, the regulations must be applied to all classes of public carriers, if all use the highway in the same way and create the same hazards. A contrary construction would render the Maryland statute invalid.[21]

Who Is a Motor Contract Carrier?

Whether a motor carrier is a common or private carrier is to be determined by the regulatory commission designated by the statute, and "no court has the right to pass upon the facts to determine whether the business of the complainants falls within the class of common carrier" or private carrier, in the absence of a commission finding of facts. Only after the commission has determined whether the operation is common or private carriage is its order pertinent thereto subject to a final review as to validity by the state supreme court. A cease and desist order of the California Commission, based on no finding of facts stated in its bill of complaint, was found insufficient, and a motion to dismiss the complaint was granted by a federal district court.[22]

Despite the statutory efforts at definition much difficulty has arisen inevitably in determining what constitutes contract carriage and what does not. This difficulty was realistically recognized by the Connecticut Commission in stating recently that no exact statement of facts can be set up as the standard of determining whether a person is entitled to a permit for a contract motor carrier service, but that a full examination of the facts of each case must be made, and a decision arrived at on the basis of the findings resulting from that examination.[23]

Admitting that contracts are the essence of the contract carrier business, the same Commission held inconclusive of the contract carrier character the mere fact that each transportation of property is done under a contract, for such a procedure might serve to grant special favors violative of the common carrier character of a motor transportation service.[24] The Commission then proceeded to state the norm of contract carrier: one who operates over no fixed route, does not solicit business generally, puts out no advertising, dispatches his trucks to or from plants of manufacturers, undertakes to provide the service only as it is demanded, bases his charges on a schedule of rates offered to all who employ him, is ready to consider extending his service to other manufacturers as opportunity develops, and who reserves at all times his power of selecting his customers. By extending the term "manufacturers" as used in the specific case at hand to include all others seeking the service the carrier is prepared to furnish, we discover in

[19] *Hicklin v. Coney*, 290 U.S. 169; 78 L.Ed. 247; 54 S.Ct. 142 (1933).

[20] Note 13, *supra*.

[21] Note 6, *supra*.

[22] *U.S. Tanning Assn. v. R.R. Com. of Calif.*, 5 P.U.R. (N.S.) 269 (1934).

[23] *Re Sanford*, 11 P.U.R. (N.S.) 261 (1935).

[24] *Ibid.*

the above the classic definition of contract carrier.[25]

The Michigan act distinguishes between public and private carriers by defining the former as substantially common carriers and the latter substantially as "all motor carriers other than public carriers and operating under contract or otherwise."[26] The Supreme Court of Michigan has held to be a private [contract] carrier and not a common carrier an operator who does not hold himself out to the public to transport property or persons indiscriminately, who had insufficient equipment to do so, and who selected his patronage with discrimination.[27]

Likewise in Iowa the contract character attaches to the transporter of goods in a particular city for merchants who contract with him for such service, the transporter not offering his service to merchants indiscriminately.[28]

He who transports freight for hire under contract with various individuals is not a "public motor vehicle carrier for hire" in the sense of the Colorado statute.[29] Hence he is a contract carrier.

Motor transportation by dump trucks hauling chiefly sand, gravel, coal, and brick for contractors, the charges being determined by the amount hauled, the distance involved, and road conditions, the operator being willing to serve any one needing such service and reserving no particular right of selection, the understanding between the two parties taking the form of a service agreement rather than a contract for hauling property, constitutes contract rather than common carriage, and a permit therefor was issued by the Connecticut Commission.[30]

A motor carrier whose main business is operating a warehouse but who provides trucking service for four specific patrons under private contract between fixed points and over a definite route, and who as occasion arose transported the owners' goods from the warehouse to designated points under a standard bill of lading is a contract carrier within the meaning of the Michigan statute, and the state commission's refusal to grant a permit as a private (contract) carrier was reversed.[31]

He who leases his motor trucking equipment under contract to furnish trucks and drivers and to pay all operating expenses, the drivers to be under the exclusive control of the lessee as to operation, is a contract carrier, and the Texas statute requires him to obtain a permit as authorization to operate.[32] In a later case the Texas Court of Civil Appeals held as contract carriers the lessors of motor trucks who by agreement leased their trucks to cotton merchants for transporting cotton purchased by those merchants for export.[33]

There appears no *denial* of any portion of the comprehensive distinction of contract carriers made by the Connecticut Commission and set forth at the beginning of this section. But since litigation in each state proceeds from the facts of the specific case, we cannot

[25] Earlier attempts at distinguishing contract carriers appear in *Re Patton*, P.U.R. 1931 D 38 (1931); *De Matteis v. Jones*, 255 N.Y. Supp. 178 (1932); *Grolbert v. Board of Railroad Commissioners*, 60 Fed. (2nd) 321 (1932).

[26] Pub. Acts 1931, Act 312, § 1.

[27] *Re Border Cities Trucking Co.*, 261 Mich. 385; P.U.R. 1933 D 201 (1933).

[28] *State ex rel Railroad Commissioners v. Carlson*, 251 N.W. 160; 1 P.U.R. (N.S.) 489 (1933).

[29] *McDill v. Northeastern Motor Freight*, 92 Colo. 198; 19 Pac. (2nd) 204 (1933).

[30] *Re Karlson*, 11 P.U.R. (N.S.) 264 (1935).

[31] *Re Columbian Storage and Transfer Co.*, 261 Mich. 390; 246 N.W. 185 (1933).

[32] *Reavely v. State*, 2 P.U.R. (N.S.) 90; 63 S.W. (2nd) 709 (1933).

[33] *Anderson, Clayton & Co. v. State ex rel Allred*, 68 S.W. (2nd) 544 (1934).

conclude that there is general regulatory accord with the norm established by Connecticut. All that can be said is that regulatory experience shows a tendency to approximate that norm of distinction.

Who Is Not a Motor Contract Carrier?

Because common carriers are subject to a more restrictive regulation than are contract carriers, those who wish to escape with the minimum public control often spend their best effort at proving themselves contract carriers rather than common carriers. Abundant is the evidence that much of this effort has proved unsuccessful because of the parties to the contract for the transportation, the provisions and scope of the contracts, and the particular conditions under which the contracts were made and are to be performed.

The Washington statute[34] exempts agricultural motor carriers from the classification of "contract carriers" but the Washington Supreme Court held them to be "for-hire carriers," a term defined by the same statute as encompassing all other carriers than those regularly engaged in transporting for hire by motor vehicles.[35]

A railroad company holding no certificate to engage in motor common carriage cannot legally obtain motor transportation of freight through a contract with a contract motor carrier; the motor carrier so hauling freight for such a railroad is engaged in common carrier operation, which operation is contrary to the terms of his permit, and the commission has power to order the railroad to cease the motor truck operations involved. To so handle this freight the motor carrier must have a certificate of public convenience; his hauling particular commodities for specified persons, or in truck-load lots only, does not remove his activity from the common carrier classification.[36]

A motor carrier contracting with a railroad to haul for the latter is indirectly serving the public, and consequently he is a common carrier, ruled the California Railroad Commission.[37]

Transportation of furniture in Pennsylvania under contracts made by local corporations for an out-of-state parent corporation which in turn makes contracts with actual transporters of the goods, constitutes common carrier service for which a certificate rather than a permit is required.[38]

The contention of a motor express company transporting money, securities, bullion, and other valuables that, by basing its charges on the amount of protection provided and not on distance travelled, it is a contract carrier service fails to distinguish the service from common carriage; but in view of the respondent's apparent belief that it was operating a bona fide contract service, no penalties were imposed by the Pennsylvania Commission.[39]

Uncertificated carriers who haul milk by contract with a dairymen's cooperative association and its members, the real service being performed for the association members, new members being solicited and served indiscriminately, the hauling constituting the chief business of the carriers who get their pay from the members but through the association are not engaged in contract

[34] Laws of 1933, § 613.

[35] *State ex rel Scott v. Superior County*, 4 P.U.R. (N.S.) 104; 24 Pac. (2nd) 87 (1933).

[36] *Re Mo. Pac. R.R. Co.*, 6 P.U.R. (N.S.) 36 (1934).

[37] *Re Pacific Motor Transport Co.*, 38 Calif. R.R. Com. Reports 888, abstracted in P.U.R. Annual 1934, at 273 (1934).

[38] *Knight v. Red Ball Transit Co.*, 2 P.U.R. (N.S.) 221 (1933).

[39] *Protective Motor Express Co. v. Brink's Express*, 7 P.U.R. (N.S.) 487 (1934).

carrier service but in an unauthorized common carrier service.[40]

Not contract, but only common, carriage is the entire service of an operator who carries newspapers for one customer and hauls small packages as occasion demands along the routes served by his buses, despite the fact that hauling the newspapers, if done alone, would constitute contract service. The Maine Commission denied a request to change the newspaper transportation service to contract service. The package service, for which a rate schedule had been filed, the Commission considered common carriage which should be continued.[41]

Motor truck service between Los Angeles and specified oil fields operated on a daily schedule and on a rate schedule agreed to in advance by the individuals, corporation, and shipping association and amounting to $6,000 a month constitutes common carrier service for which a certificate of public convenience and necessity is required, despite a "contract" between the transporters and each customer obtaining the service. To the California Commission this "contract" requirement constituted merely a subterfuge; a cease and desist order was issued against such operation until a certificate should be obtained therefor.[42]

No contract service was created by a purported contract with a shipper whereby the latter was not bound to furnish any freight to transport, but could avail himself of the transportation service should he so desire. The Washington agency ruled this merely a unilateral agreement and not recognized by the regulatory statute applicable to contract carriers.[43]

Very similar to this Washington case is a recent one in California, where "contracts" were simply rate quotations, the terms of which lacked mutuality and exclusiveness. Carriers concerned were ordered to cease operation, because their activity constituted common carriage.[44]

II. Development of Special Regulations

Authorization to Operate

Contract carriers are authorized to operate by obtaining permits from the regulatory body. The permit differs from the common carrier certificate in that public convenience and necessity essential for the latter is not required to be shown for the former.

Like common carrier regulation,[45] contract carrier regulation allows bona fide operators on statutory date [46] to continue their established activity as a matter of right. All that is necessary for the bona fide operator is that he show he was doing bona fide business on the statutory date, and he will receive the permit as a matter of vested right. But he who was operating bona fide contract carrier service on statutory date cannot thereby demand a certificate to operate common carriage.[47]

An operator who had for many years prior to the statutory date operated bona fide service but who had ceased to operate a very short time before the statutory date, and who did not apply for a permit until a month after the

[40] *Robinson v. Townsend*, Pa. Pub. Ser. Com., Complaint Docket 9706-9708 (1934).

[41] *Re Lewis and Dunn*, 8 P.U.R. (N.S.) 285 (1934).

[42] *Asbury Truck Co. v. Ball*, 9 P.U.R. (N.S.) 98 (1934).

[43] *Re Buchanan*, Order M.V. 4934; P.U.R. Annual 1934, at 224 (1933).

[44] *Southern Pac. Co. v. Hill*, 38 Calif. R.R. Com. Reports 144 (1932).

[45] See pages 70-72 of the writer's *Motor Carrier Regulation in the United States* (Spartanburg, S.C.: Band & White, 1929).

[46] "Statutory date" is usually the effective date of the regulatory statute, but sometimes a different date is specified. See *Re Stefano*, 12 P.U.R. (N.S.) 459, involving the Rhode Island act.

[47] *Re Stanley*, 5 P.U.R. (N.S.) 357 (1933).

statutory date, was granted the permit by the Rhode Island Commission because of his long and acceptable service and his demonstration that his business and that of his competitors had improved noticeably. In this circumstance the Commission interpreted the statutory date as approximating the intention of the legislators.[48]

Unless a bona fide contract carrier applies for the permit within the statutory period he cannot demand the permit as a matter of right.[49] But in the present case the applicant obtained the permit because he had demonstrated eagerness to comply and his failure was attributable to bad sources of information and because the commission found that public convenience and necessity would be served by his operation. He was allowed to continue transporting particular products between specified points.

A contract carrier was granted a permit to transport merchandise to customers of a mail order house within a radius of 50 miles of the particular city, on the ground that the common carrier service in the area involved would not be readily adaptable to the service required in connection with returns and exchanges of the goods.[50]

The possibility that some common carrier in the area might be adversely affected was insufficient ground to deny a permit to a Colorado applicant who proposed to transport beer, ale, and spirituous liquors over irregular routes to various points in the State, the service requiring seasonal equipment to keep the article transported at an even temperature. But this applicant was restricted to territory other than that covered by the certificate he held for common carrier service because of the rule that a carrier cannot operate over the same route, with the same equipment and serve the same community as both a common and a contract carrier.[51]

Closely approximating contract permits are the certificates issued by the Missouri Commission for special contract tours within 200 miles of a specified city.[52]

Limitations on the permitted operation are often stated, but other limitations may arise from interpretation. The Pennsylvania Commission has held that a common carrier whose certificate allows him to transport groups and parties between points on his certified route cannot by that authorization transport groups or parties between points not on his certified route. Such resort to contract service was ordered to cease.[53]

On various grounds permits have been denied. A permit was refused for transportation of potatoes in Maine because the applicant was a seventeen-year-old minor and therefore disqualified as to the statutory responsibility for contracts entered into.[54]

The Maine Commission has denied a permit to a bona fide operator on effective date because he did not explain satisfactorily his failure to apply for it for more than six months after effective date. The Commission held that six months' delay exceeded the statutory allowance of a "reasonable time" within which to apply.[55] Perhaps of conse-

[48] *Re Stefano*, 12 P.U.R. (N.S.) 450 (1935).
[49] *Re Ernest Wells*, 5 P.U.R. (N.S.) 442 (1934).
[50] *Re Foley Trucking Co.*, 12 P.U.R. (N.S.) 533 (1936).
[51] *Re Frank Pless*, 12 P.U.R. (N.S.) 111 (1935).
[52] *Re Peoples Motor Bus Co.*, P.U.R. Annual 1934, at 36 (1934).
[53] *McKeesport Transit Co. v. McCoy Bros.*, 13 P.U.R. (N.S.) 185. No penalty was imposed in this case because the activity had been resorted to under advice of counsel.
[54] *Re Fox*, 7 P.U.R. (N.S.) 386 (1934).
[55] *Re Norman H. Knightly*, 12 P.U.R. (N.S.) 154 (1935).

quence here was the fact that representatives of railroads and established motor carriers appeared at the hearing on the application and protested vigorously against granting the permit.

A permit was refused for hauling supplies for the Federal Forest Service in Arizona on two grounds: (1) applicant would operate in only part of the area in which the Forest Service would require transportation, and therefore could not meet the Comptroller General's requirement for a lump-sum composite bid for entire transportation as a unit; (2) willingness of existing contract carriers to continue their transportation deemed satisfactory by the Forest Service, and likelihood that they would suffer loss of business were the competing service authorized.[56]

The Colorado Commission has denied a permit because existing common carriers would suffer further impairment of their ability to serve the public in the manner legally required of them.[57] The state act directs that public interest and public welfare be served, and that the public utility be fostered and protected.

Repeatedly the Utah Commission has ruled that under the 1933 regulatory act[58] it has no authority to confer on anyone the "unlimited right to use all the highways of the state for the transportation of persons or property." Pursuant to the statutory provisions on adequacy of existing transportation facilities, and because of the congested condition of highway travel, the Commission held existing facilities adequate and denied a permit for hauling liquor for the state liquor control commission from a certain distributing point to state stores throughout the state.[59]

After making proper determination that safety of the travelling public would be threatened by additional use of the highways, a state commission may refuse a permit for contract carrier use of highways. On this score contract carriers can be treated as if they were common carriers.[60]

A few cases involving state power over permits for interstate contract carriage have appeared in the record. The Colorado agency has recognized its inability to deny a permit for interstate operation; this position was taken in a case in which a permit for intrastate activity was denied.[61]

Application by an interstate common carrier of property for a permit to transport from various points in Maine to Portland goods destined to out-of-state points, and to haul from Portland to various points in Maine goods shipped from other states, the transportation in each direction being conducted under bona fide bills of lading showing interstate shipment, was dismissed on the ground that no permit was necessary for interstate transportation service by truck.[62]

An opposite interstate case came before the Maine Commission last year. Goods were being transported from Point A in Maine to Point B in Maine, where they were accepted by a contract carrier under contract with the shipper (not with the first carrier) for transportation to Boston. Because the second carrier was interstate he had not been allowed to transport intrastate in Maine. The Commission held the hauling by the

[56] *Re Lightning Delivery Service*, 12 P.U.R. (N.S.) 164 (1935).

[57] *Re Borck*, 7 P.U.R. (N.S.) 264 (1935).

[58] Laws of Utah, 1933, c. 53.

[59] *Re Utah Transportation Company*, 13 P.U.R. (N.S.) 332 (1935).

[60] *U.S. District Court in Wald Storage and Transfer Co. v. Smith*, 4 Fed. Supp. 61; 1 P.U.R. (N.S.) 91 (1933).

[61] Note 57, *supra*.

[62] *Re Fulton Fast Freight Co., Inc.*, 11 P.U.R. (N.S.) 91 (1935).

first carrier to be preparatory to, but not a part of, interstate transportation, a matter in which the Commission has discretion in granting or withholding permits. On the ground that the efficient public service of an established common carrier would be impaired, discretion was exercised by denial of the permit.[63]

A permit for interstate contract transportation of goods was recently denied by the Indiana Commission. Stated reasons for the refusal follow: (1) full flow of interstate commerce will not be disturbed, for the goods proposed to be moved through Indiana have in the past reached their destination through common carriers; (2) highways of Indiana over which the applicant proposes to travel are heavily congested; (3) testimony of the applicant for the route proposed from Louisville, Kentucky to Cincinnati, Ohio shows that the purpose of travelling through Indiana is to avoid particular laws of Kentucky regulating motor vehicles.[64]

Transfer and Revocation of Permits

Receiving authorization to operate motor common carriage confers on the holder no power to transfer the privilege at will; the regulatory agency must approve the transfer; likewise, certificates are subject to revocation by the issuing agency.[65] Similarly, contract transportation is being regulated.

The Colorado Commission refused to transfer a portion of a permit where an enlargement of the original permit would result, and two or more operators would function under such competitive conditions as to impair the efficient public service of motor common carriers serving the area.[66]

The same Commission authorized a motor carrier of coal to discontinue his service during the summer months, agreeing that he could renew the permit within six months from the revocation. Such procedure comports with the policy of the Colorado Commission.[67]

The Maine agency refused to cancel the permit of a contract carrier who had performed substantially common carrier service at less than fixed minimum common carrier rates; the permittee showed that the rate cutting had not been willful, and that it had been discontinued.[68]

License Fees and Taxes

Little conflict has arisen (in the period here considered) as to the imposition of license fees and taxes on contract carriers. Chief explanation for this lies in the authoritative ruling by the Supreme Court in 1933 that contract carriers, interstate as well as intrastate, can be required to pay reasonable license fees to maintain the highways used. Carrying capacity of vehicles constitutes a proper basis for levying the fee, the exaction puts no undue burden on interstate commerce, and the receipts from the license fees for interstate and intrastate operation are designed and segregated to maintain highways employed by motor vehicles.[69]

The Oregon Supreme Court has held that a ton-mile tax does not invalidly discriminate against contract carriers as favoring private haulers not subjected to the levy.[70]

[63] *Re Gay*, 11 P.U.R. (N.S.) 89 (1935).
[64] *Re Howe Bros., Inc.*, 13 P.U.R. (N.S.) 42 (1936).
[65] See Chapter 12 of writer's work cited in note 45, *supra*.
[66] *Re Everitt*, 12 P.U.R. (N.S.) 158 (1935).
[67] *Re Lee Barnes*, 12 P.U.R. (N.S.) 96 (1935).
[68] *Re Hodgdon Transportation Co., Inc.*, 10 P.U.R. (N.S.) 229 (1935).
[69] *Hicklin v. Coney*, 290 U.S. 169; 78 L.Ed. 247; 54 S.Ct. 142 (1933). The Court here relies on its opinion and decision in *Clark v. Poor*, 274 U.S. 554; 71 L.Ed. 1199; 47 S. Ct. 702 (1928).
[70] *Anderson v. Thomas*, 2 P.U.R. (N.S.) 193; 26 Pac. (2nd) 60 (1933).

Rates and Liability Insurance

To conserve its highways the state may regulate minimum rates of contract motor carriers so as to prevent their rendering service at charges which tend to divert traffic from the railways and to increase traffic on the highways, according to the Supreme Court in *Stephenson* v. *Binford.*[71] Despite the left-handed and indirect approach in that statement, the result of the pronouncement has brought constructive policy in regulation of contract carriers.

The records reveal only slight exercise of the state power to fix rates. In 1933 the United States Supreme Court refused to pass judgment on the rate provisions of the South Carolina statute where the state court had held that no effort had been made to exercise the rate fixing power, if any such power had been conferred on the commission by the statute.[72]

Power to regulate rates of contract carriers as conferred on the commission by the Oregon statute has been sustained by the state supreme court.[73]

The right of contract carriers to contract for motor transportation is not violated by a state act regulating rates, service, and practices of private carriers, the purpose of the regulation being to prevent unfair competition with common carriers.[74]

Both interstate and intrastate contract carriers can be required to provide proper insurance to protect the public against injury to person and damage to property arising in the course of operation. The Supreme Court of South Carolina had interpreted the statute to preclude application of the insurance requirement to the cargo of contract carriers, and the United States Supreme Court held itself bound by this interpretation. Such requirements are proper under the state police power to control the use of its highways and do not violate either the due process, equal protection, or commerce clause of the Constitution.[75]

Requiring contract carriers to file liability insurance does not invalidly discriminate against contract carriers in favor of private carriers exempted from such requirement.[76]

Significance and Conclusions

Some confusion arises from the phraseology used in defining motor contract carriers; for example, the term "private carrier" appears to denote contract carriers and all other for-hire carriers except common carriers. The contract carrier character has been extended to the relation between lessor and lessee of equipment for the motor carrier transportation involved.

Much difficulty is experienced in determining whether a particular operation constitutes contract or common carriage. The dictum of the Colorado Supreme Court 10 years ago that a carrier is to be classified not by what the authorization says but by what the operator does continues to guide regulatory bodies. Whether a carrier is a valid contract carrier depends on the parties to the contract under which he operates, the provisions and scope of the contract, and the particular circumstances under which it is made and is to be performed.

States may classify motor carriers on the basis of type of service offered and the frequency and extent of use of the highways involved. Neither contract, due process, nor commerce clause of the

[71] 287 U.S. 251; 77 L.Ed. 288; 53 S.Ct. 181 (1932).
[72] First case in note 69, *supra.*
[73] Note 70, *supra.*
[74] *Baker v. Glenn,* U.S. Dist. Ct., 2 Fed. Supp. 880 (1933).
[75] First case in note 69, *supra.*
[76] Note 70, *supra.*

Constitution is violated by such classification.

Now that contract carriers are legally differentiated and regulated as such, in order to escape from the regulations much resort is made to attacking as invalid specially exempt operators, such as agricultural haulers and shipper-owners. But the state possesses the power to exempt these from regulations imposed on contract carriers.

An increasing number of factors now enters into the granting of a permit. But stress is put on justification of the service and safety of the travelling public as these affect directly the public, and also on their economic effect on the established transportation facilities.

Power of the state to deny a permit for interstate contract operation has been asserted and, in light of *Bradley* v. *Public Utilities Commission of Ohio*[77] and *J. P. Grubb Co.* v. *Public Utilities Commission of Ohio*,[78] the refusal appears thoroughly valid. Subterfuges to establish the valid interstate character of an operation continue to be exposed as trickery.

While the rule is that restrictions be stated in the permit at time of issuance, state police power has warranted "interpreting" further limitations into a previously granted permit.

[77] 289 U.S. 52; 77 L.Ed. 1053; 53 S. Ct. 577 (1933).
[78] P.U.R. 1930 D 15-20; 74 L. Ed. (1930).

Little conflict has arisen over rate-fixing, the chief reason being state hesitancy to prescribe rate schedules for contract carriers.

Reasonable liability insurance requirements can be imposed on interstate and intrastate carriers, but the liability can be exacted from the interstate operators only as protection against injuries to third parties and damage to their property. Insurance protecting interstate passengers or cargo cannot be required by the states.[79]

Increasingly complex becomes the regulation of motor contract carriers, not so much as to the particular phases of their activity subject to control, for this has been greatly clarified, but chiefly as to their relation to other contract carriers, established motor common carriers, the railroads, and to the travelling and shipping public.

Contract carriers continue to move from the status of private enterprise toward public utilities. In no instance has an applicant had to prove public convenience and necessity as the basis for a permit, but public welfare measured in well-being of railroads and established motor carriers has proved an active factor in decisions on applications for permits.

[79] *Sprout v. South Bend*, 277 U. S. 163; 72 L.Ed. 833; 48 S. Ct. 502 (1928).

Excess Condemnation for City, County, Township and Regional Planning

By JEWELL CASS PHILLIPS*

WHEN city, county, township and regional planners meet to discuss their common problems there is a remarkably consistent emphasis upon promotion of the general welfare and advancement of the public interest. This emphasis is observed in the discussion of the broader subjects of city and regional planning and in the detailed analyses of single important aspects of planning, such as housing, park and recreational facilities, airports, and zoning.

Professor Thomas Adams of Harvard University has recently pointed out that the chief defects of modern cities exist[1]

> "because of piecemeal planning, mainly by real estate developers in their private interests and without adequate consideration for the community as a whole. . . . The result is a hodge-podge of unrelated plans . . . and [he adds] what matters is not whether we plan but whether we plan intelligently."

Intelligent planning must of necessity be broad and comprehensive and its effectuation depends in large measure upon the unselfish cooperation of all important interests in a community. Excess condemnation is predicated upon the assumption that the general welfare is superior to individual gain, and that reasonable sacrifices on the part of the individual are necessary in order to advance the interests and well-being of the group. The device is an effective means of providing for a fuller realization of the important objectives of city, county, township and regional planning. It is a part of a broader program of land acquisition, and its real value may be appreciated only when it is considered with due regard to that relationship.

Methods of Acquiring Land for Planning Purposes

In order to accomplish the objectives of modern planning, the various planning units must acquire, develop, and control vast quantities of land. Three principal methods are available for these purposes. First, land may be purchased in the open market at such a price as may be agreed upon by city officials and individual property owners. This method, however, is usually unsatisfactory because city officials are notoriously unable to bargain successfully with property owners and because the method readily lends itself to political manipulation.

A second means of acquiring land for planning purposes is through dedication. Real estate concerns may at times be quite eager to give land to the city on the condition that the city use the land for construction of streets or beautiful parks. Occasionally some individual with a philanthropic motive will donate land for park, playground, or other purposes. But regardless of the motive which prompts these gifts, this method of acquiring land is unreliable and fails to meet the needs of the planning unit.

Third, much of the land acquired for planning purposes in this country is taken under the power of eminent domain. This power is inherent in the nation and in the state, and is delegated

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[1] Thomas Adams, *Outline of Town and City Planning* (New York: Russell Sage Foundation, 1935), pp. 21-22.

to subdivisions of the state and to public utilities by statute or constitutional provision. It is the power to take private property for public use upon payment of just compensation.

Excess Condemnation Defined

Excess condemnation has been defined as[2]

"the policy on the part of the state or city (or nation) of taking by right of eminent domain more property than is actually needed for the creation of a public improvement, and the subsequent selling or leasing of this surplus."

It is not generally considered to include excess purchase, nor does it include land which is used directly in the creation of the improvement which the city has undertaken. When cities in England and Scotland were permitted by Acts of Parliament to condemn entire slum areas and to rehabilitate the areas by erecting workmen's cottages which they subsequently rented, the land condemned was used for a definite public purpose and was not considered to be an example of excess condemnation.[3]

Objectives of Excess Condemnation

Where more land is taken than is needed for the actual construction of a public improvement, one or more of three main objectives may be sought. The first of these is to solve the lot remnant problem. When highways, boulevards, or parkways are constructed, they frequently intersect building lots diagonally. As a result, a vast assortment of land remnants is created which possess little utility. Moreover, these odd-shaped remnants are often found in the most inappropriate places and they detract from the esthetic value of public improvements. They may also serve as barriers which make particular improvements inaccessible to adjacent property owners.

The lot remnant problem may in large measure be solved through rational use of excess condemnation. Under this plan enough excess land will be taken adjacent to a public improvement to enable planning authorities to combine the excess with remnants for purposes of replotting. The building sites so created may then be sold under such restrictions as the planning authorities may deem necessary for protection of the public improvement.

In the second place, excess condemnation may be used as a means of protecting the beauty and utility of improvements. To this end the state statutes or the state constitutions provide that land in excess of that which is actually used in the construction of a street or other improvement may be condemned to the extent of 100 or 200 feet on each side of the improvement. The planning unit is then empowered to use this land to provide suitable building sites which may be sold under such restrictions as the unit may see fit to impose.

Finally, excess condemnation has been used considerably in England and in some continental European countries for the purpose of recouping the financial outlays for public improvements. This objective has been justified on the ground that construction of public improvements enhances the value of adjacent property and that the planning unit is entitled to the unearned increment.

Extensive European experience has demonstrated that excess condemnation is both practicable and justifiable when used discreetly. The experience of our American cities with the device is so limited, however, that few substantial conclusions may be drawn as to its

[2] Robert Eugene Cushman, *Excess Condemnation* (New York and London: D. Appleton & Co. 1917), p. 2.

[3] *Ibid.*, p. 3.

efficacy in this country. One of the most serious obstacles to use of excess condemnation in America is the attitude of the courts. It is, therefore, exceedingly important that we consider in some detail the legal aspects of the device.

Statutory and Constitutional Provisions for Excess Condemnation

A number of American states have authorized their subdivisions to make use of excess condemnation by merely enacting statutes conferring the authority. These laws, however, have been invalidated by the courts in most of the states where they have been contested. Probably the first law providing for excess condemnation in this country was the New York Act of 1812. The privileges provided by the act were used freely for several years but the New York Supreme Court finally declared it invalid in 1834.[4]

A South Carolina Act of 1817 empowered municipalities to take land remnants created by a public improvement under the power of eminent domain. In the case of *Dunn* v. *City Council of Charleston*,[5] the South Carolina Supreme Court held that the City had been empowered to take only that land which was actually needed for construction of the street. While the act was not invalidated, it was so narrowly construed that cities were not permitted to exercise the powers of excess condemnation which the act seemed to confer in clear and unmistakable terms.

A much more important and more recent statute providing for excess condemnation was the Massachusetts Remnant Act of 1904. Under this act,[6] the city or state could take an entire tract of land under its power of eminent domain if the remnants created by the construction of an improvement were unsuitable for building sites, provided, however, that the public convenience and necessity required the excess taking. The limited scope of this act is apparent, and its inadequacy led to a legislative attempt to broaden the act to permit local authorities to protect their public improvements through excess condemnation of land other than remnants. The land taken in excess would subsequently be replotted and sold under restrictions providing the desired protection. This legislative proposal was submitted to the Massachusetts Supreme Court in 1910 and in an Advisory Opinion of the Justices[7] it was declared to be unconstitutional. The Court said:

> "the question seems to relate particularly to the power of the legislature to take and use land outside of the proposed thoroughfare for purposes which have no direct relation to the construction or use of the street for travel."[8]

The proposal was not in accord with the court's concept of public use. Hence it was invalid.

Pennsylvania's Experience

The recent history of excess condemnation in Pennsylvania goes back to the Act of June 8, 1907. Under this act, cities of the state were empowered to condemn private property for playground, park and parkway purposes and also to take additional property to the extent of 200 feet on each side of the improvement for the purpose of "preserving the view, appearance, light, air, health, or usefulness thereof." Cities were given the right to resell the excess property acquired, and to provide in the deeds of resale such restrictions in regard to the use thereof as would in-

[4] *In re Albany Street*, 11 Wendell 149 (1834).
[5] 7 S. C. 189 (1824).
[6] Acts of 1904, c. 443.
[7] 204 Mass. 607.
[8] *Ibid.*

sure adequate protection of the improvement constructed. This act was declared to be unconstitutional in the famous Parkway case of *Pennsylvania Mutual Life Insurance Co.* v. *Philadelphia*,[9] on the ground that the land acquired outside the improvement was not occupied, used and enjoyed by the public. The Pennsylvania Supreme Court thus applied a strict construction of the term "public use"[10] in deciding that the excess condemnation statute violated the "due process" clause of the Fourteenth Amendment.

The principles laid down in the New York, South Carolina, Massachusetts and Pennsylvania cases seem to be controlling. While the highest courts in some states have construed the term "public use" liberally in upholding particular uses of the power of eminent domain,[11] the writer has been unable to find examples of such liberal construction in cases involving excess condemnation. States, therefore, which have desired to provide for use of excess condemnation by their subdivisions have amended their constitutions to assure its validity. Beginning with Massachusetts in 1911, nine states have added excess condemnation amendments.[12]

Excess Condemnation under State Constitutional Provisions

While there are some variations in the state constitutional provisions authorizing use of excess condemnation, the Ohio amendment seems to be fairly typical. Under the Ohio provision

> "a municipality appropriating or otherwise acquiring property for public use may in furtherance of such public use acquire an excess over that actually to be occupied by the improvement, and may sell such excess with such restrictions as shall be appropriate to preserve the improvement made."[13]

The Vester Case. Under the Ohio provision, the City of Cincinnati passed an ordinance appropriating a strip of land 25 feet in width adjacent to the boundaries of Fifth Street for the specific purpose of widening the street. The ordinance also provided for condemnation of areas adjacent to the 25-foot strips to provide suitable building sites which were to be resold to private individuals.

In the case of *City of Cincinnati* v. *Vester*,[14] the United States Supreme Court declared the Cincinnati ordinance to be in conflict with the "due process" clause of the Fourteenth Amendment because the ordinance did not adequately describe the purpose for which the excess land was to be taken. The ordinance merely stated that the excess land was to be condemned and resold in furtherance of the public use to which the land taken for street widening purposes had been put. Such a provision, in the opinion of the Court, did not indicate that the excess taking was for a public purpose.

The United States Circuit Court of Appeals which had previously heard the

[9] 242 Pa. 47; 88 Atl. 904 (1913).

[10] The courts of some states have adopted a liberal construction of the term "public use," holding that the use need only be "of great public benefit, or interest or advantage to the community." (*Dayton Gold and Silver Mining Co. v. Seawell*, 11 Nev. 394 (1876).) In the case of *Nash v. Clark*, 27 Utah 158; 75 Pac. 371 (1904), the Utah Supreme Court considered the doctrines of strict and liberal construction, and declared "we are of the opinion that the class of decisions last mentioned (liberal) are more in harmony with enlightened public policy, and the liberal interpretation given the term 'public use' . . . is far more conducive to individual and public advancement than the restricted construction adopted and followed by the line of decisions first referred to." See also Lewis, *Eminent Domain*, Vol. I, ¶¶257-8 and decisions cited *infra*, notes 18-21, inclusive.

[11] *Infra*, p. 000.

[12] Massachusetts, 1911 and 1915; Ohio and Wisconsin, 1912; New York, 1913; Rhode Island, 1916; Virginia, California and Michigan, 1928; and Pennsylvania, 1933.

[13] Article XVIII, §10.

[14] 281 U. S. 439 (1930).

case of *Cincinnati* v. *Vester*[15] considered the three main purposes for which excess condemnation is used[16] and could find no connection between the Cincinnati ordinance and the remnant theory or the theory that such taking was necessary to preserve the beauty and utility of the improvement. They also held that condemnation and resale for the purpose of recoupment only were a violation of the "due process" clause of the Fourteenth Amendment, since such condemnation was not for a public purpose.

The United States Supreme Court and the Doctrine of Public Use

The two decisions in the Vester case seem to warrant the inference that excess condemnation, under the "due process" clause of the Fourteenth Amendment, can be sustained only through application of the liberal view of "public use," i.e., public benefit or advantage as opposed to physical use by the public.[17] As far as the writer knows, the United States Supreme Court has not considered any other case involving excess condemnation under a state constitutional provision authorizing its use. The Supreme Court has gone far, however, to sustain state supreme court decisions in respect to the use of eminent domain, even in cases where those courts have construed the doctrine of public use liberally.

The United States Supreme Court sustained a decision of the Utah Supreme Court allowing condemnation of private lands for use by mining companies in transporting their products to railroads.[18] The Court has also approved decisions allowing such condemnation for the benefit of mill owners[19] and irrigation companies.[20] The Supreme Court's policy seems to be that what constitutes a public use depends in large measure upon local conditions, and that the decisions of state legislatures and of the highest state courts will be given considerable weight in determining what constitutes a public use under a given set of conditions. Thus, in the case of *Rindge County* v. *County of Los Angeles*,[21] the Supreme Court said that the "determination of this question [of public use] is influenced by local conditions; and this court while enforcing the Fourteenth Amendment should keep in view the diversity of such conditions and regard with great respect the judgment of state courts" as to what constitutes a public use. Said the Court, "public uses are not limited in the modern view to matters of mere business necessity and ordinary convenience, but may extend to matters of public health, recreation and enjoyment."

Excess Condemnation: A Legal and an Engineering Problem

It seems clear that if excess condemnation is to serve the practical purposes for which it is needed in city, county, township and regional planning, it must first be definitely provided for by amendments to our state constitutions. Furthermore, its practical application must be so carefully and skillfully planned by the legal and engineering departments of the city, county or township concerned that it will unquestionably be for a public purpose.

The responsibility of the law and engineering departments for valid use of excess condemnation is amply illustrated in the case of *City of East Cleveland* v.

[15] *Ibid.*

[16] *Supra*, p. 000.

[17] *Supra*, n. 10.

[18] *Strickley v. Highland Boy Gold Mining Co.*, 200 U. S. 527 (1906).

[19] *Head v. Amoskeag Mfg. Co.*, 113 U.S. 9 (1885).

[20] *Fallbrook Irrigation Dist. v. Bradley*, 164 U.S. 112 (1896); *Clark v. Nash*, 198 U.S. 361 (1905).

[21] 262 U.S. 700 (1923).

Nau,[22] decided by the Ohio Supreme Court in 1931. The City of East Cleveland had passed an ordinance providing for appropriation of excess lands abutting on each side of a street extension. The purpose of the excess condemnation as stated in the ordinance was to provide for the creation and grading of the slopes to the street. The court, however, held that the ordinance was unconstitutional, since the City is not only required to define specifically the purpose of the appropriation but it must sustain such requirement by proof of its necessity. Since the proof was lacking, the ordinance was held to be in conflict with Article XVIII, Section 10 of the Ohio Constitution. While this decision is unfortunate in so far as it imposes very rigid limitations upon use of excess condemnation, it does emphasize the responsibility of the legal and engineering departments in planning for condemnation of this type.

Is There a Real Need for Excess Condemnation?

Excess condemnation has been opposed on the grounds that it is too drastic and that it is wholly unnecessary. The suggestion has been made that other less onerous devices may be employed to accomplish the main objectives underlying the use of excess condemnation. The one means most commonly suggested for protecting the beauty and utility of public improvements is use of the police power. While it is true that the planning unit may order the removal of nuisances and may forbid certain types of construction in properly constituted areas, use of the police power has certain definite limitations. In the first place, the courts have been exceedingly reluctant to permit planning and zoning authorities to order the removal of non-conforming uses other than nuisances. Moreover, while the police power may be used to forbid certain structures, it may not be used to require construction of other desirable types. There is no disputing the fact that the police power has been a most valuable device in the hands of planning and zoning authorities, but its limitations do not permit solution of the problems herein discussed. It in no way provides for a solution of the lot remnant and recoupment problems.

It has been suggested that a more equitable and less drastic means of providing for recoupment of financial outlays for public improvements is that of special assessments. While the writer is not prepared to condemn a fair and equitable system of special assessments, the difficulties involved in providing such a system are recognized by outstanding students of the problem. Dr. William J. Schultz points out[23] that "it is now generally recognized that most public improvements carry both a general and a special benefit, and the cost is divided between the owners of adjacent property and the general body of city taxpayers." Dr. Schultz then suggests the main problems which have not been satisfactorily solved in the use of special assessments. First, "engineers have no yardstick enabling them to apportion accurately the general and special benefits of public improvements."[24] Second, when general and special benefits have been apportioned, it is extremely difficult to determine the radius of special benefit. Third, in those cases where special assessments are large in proportion to the value of the property affected by

[22] 124 Ohio 155; 179 N.E. 187 (1931).

[23] *American Public Finance and Taxation* (1932), pp. 214-21.

[24] *Ibid.* See also Clyde L. King, *Public Finance* (New York: Macmillan Co., 1935), p. 271 and Jens P. Jensen, *Problems of Public Finance* (New York: Crowell Pub. Co., 1924), p. 158 ff.

them, it has sometimes proved difficult to work out a satisfactory plan for the payment of assessments. Even if a satisfactory system of special assessments is devised for recoupment purposes, the lot remnant problem still remains and no protection whatsoever has been provided for the beauty and utility of public improvements.

The American people have invested hundreds of millions of dollars in the preparation and execution of plans. These investments are likely to increase at a very rapid rate as economic conditions improve. Most of the improvements in which these millions have been invested have added immeasurably to the health, convenience, comfort and happiness of the people. Many of them have been conceived as works of art, and as such they have an added value which may not easily be appraised. These values, both tangible and intangible, should receive a greater measure of protection than the police power affords. The only device which seems to provide for adequate protection of the beauty and utility of public improvements and which at the same time affords a solution for the lot remnant and recoupment problems is excess condemnation. At any rate, the possibilities of this device should be thoroughly explored and it should be far more widely discussed by planning officials and civic groups than it has been in the past.

II. Power Pioneering: A Case Record

By SHAW LIVERMORE*

IN the first half of this article (in the February issue of this *Journal*, pp. 49-56) the circumstances surrounding the original promotion of the Great Northern Power Company as an undertaking to supply power in and around Duluth were described, together with the difficulties and delays in carrying out the financial plan in the years 1904-08.

Construction

In beginning its operations the Company was greatly aided by possession of the 250 acres of land near the plant which had been deeded by the Cooke companies. Most of the other needed land and rights-of-way were purchased early in 1905 without difficulty. Part of the needed area was owned by one Kingman, with an appraised value of about $2,000, including a small part on the bank of the river. For many months he refused to sell, but his holdings were finally purchased for $15,000. Most of the Duluth group were in favor of carrying the case to trial and securing condemnation, but the Company's attorney in Duluth pointed out that this would necessitate disclosure of the amount paid for the Cooke lands. This would be embarrassing to the Company in Duluth, and would in all probability result in a higher figure for condemnation than $15,000. Kingman's counsel also proposed raising the question of the right to build a dam without an Act of Congress. Such an act had not been procured, and to avoid discussion of its need was another reason for settling the matter out of court. The total cost of this and all other lands and rights was less than 10% of the payment to the Cooke companies.

The original plans called for a plant of 30,000 h.p. supplied by three 10,000 h.p. units, then among the largest generating units in the world.[12] The additional Niagara units installed a few years before had been of 5,000 h.p., or only ½ the size proposed. Soon after construction was begun it was decided to make several parts of the system adaptable to 80,000 h.p., to care for future expansion. The original estimate of $3,200,000 by the Cokefairs was thereby increased by nearly $400,000; other extra costs and delays in construction, as already noted, brought the total up to well over $4,000,000.

The physical layout included a small reservoir above the rapids in the river, from which a canal two miles in length was cut across country, meeting the curving river again at the other side of a half-circle, at a height of 375 feet. The canal ended in a forebay reservoir, separated from the canal by headgates to allow regulation of the flow into the penstocks. Three penstocks carried the water to the three units originally installed through an effective head of 374 feet. This was among the very highest heads of the period, with only a handful of plants in the world having over 300 feet before 1908.

The actual design and construction were under the direct supervision of F. O. Blackwell of Viele, Cooper & Blackwell, of which Hugh L. Cooper

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[12] Catawba Power Company, put in operation in 1904, had only 6,600 h.p. from three units. It had been regarded as a large pioneer hydro development.

was then a member. W. A. Brackenridge, resident engineer of the Niagara Falls Power Company, continued in an advisory capacity. Actual supervision in the field was done by the employees of the National Railway Construction Company, a wholly-owned subsidiary of Tucker, Anthony & Company, which sublet most of the contracts, and itself earned the usual contractor's profit, probably about $200,000.

The whole record of the construction and installation of machinery was one of delay and disappointment.[13] The primary error in the design of the project was a failure to secure adequate reservoirs. There is confusion in the records as to whether the original engineer-promoters were responsible, but it seems probable that their studies of rainfall and the resulting run-off into the Cloquet and St. Louis rivers had been superficial. In actual construction, the first difficulty was with the canal. One local firm threw up its contract early in 1908 and caused several months' delay; much of it had to be cut through rock formation, and the steam shovels used were inefficient.

The most serious difficulty arose with the Allis-Chalmers Company, which at this time and for the next six years seemed constantly heading for the receivership which finally occurred in 1912. A letter from an official in 1906 discussed the situation:

"You must remember that when the contract was originally let, there were only two concerns in the United States that were willing to take the contract at any price [for water wheels]. It was the biggest steel casting that had ever been attempted, and the Falk Company [subsidiary of Allis-Chalmers, afterward merged], and the Morris Company of Philadelphia were the only two that were willing to consider the matter at all and they were not at all anxious."

Later the engineers decided that the huge wheel casings could be cast in three pieces and machined, and the two final units to be installed were built in this way. But the castings made by the Falk Company cracked twice, and a strike finally interrupted work in the winter of 1906-07. Responsibility in the matter was complicated by the fact that delay in building the canal had caused the Allis-Chalmers Company, in February, 1906, to turn their shop forces to other orders. The first unit was not delivered until the summer of 1907; then the five-foot butterfly valves in the wheels, supplied by the old Coffin Valve Company of Boston, broke because of improper bearings. The net result was that one unit started work in September, 1907, a year late, and the other two units did not go into service until the following winter. The delay was a serious handicap in securing power contracts and necessitated installation of a new manager in 1908 to revive interest among local potential power users.

Relations with the General Electric Company

The contracts and negotiations affecting the Duluth Edison were only one phase of the interesting relationship be-

[13] It is difficult for anyone familiar only with electric construction in the past two decades to realize the difficulties and problems facing promoters in this period. This plant was aptly characterized in a report made to bankers in 1921 as having been "one grand experiment." This was not because of any fault of leadership, except in minor instances. It was primarily attributable to the paucity of engineering experience and knowledge. The same difficulties encountered here found counterparts in other undertakings before 1912, particularly in connection with transformer design, turbine construction, and high frequency transmission lines. The willingness of financial promoters to assume the risks caused by this lack of engineering aid is often forgotten, as compared with the smooth path which has been opened to similar projects since 1912 or thereabouts by our immense gains in engineering knowledge and ability.

tween the Great Northern Power Company, supposedly financed and managed independently, with the General Electric Company. Absorption into the Electric Bond and Share group of companies was the ultimate result. The only connection with General Electric financially was the fact that $50,000 had been subscribed individually by officers of General Electric to the underwriting (probably at the instance of President Coffin). Bonds or stocks were not taken in payment for equipment that was supplied; no management contract was entered into. Thus none of the grounds upon which General Electric influence is generally thought to have been based was present.

Nevertheless, there is a continuous record of favoritism toward this Company in preference to other equipment makers. The basis for this was the personal interest of P. L. Saltonstall, whose connection with the General Electric Company was at all times close. At the time of the original construction, General Electric was given all contracts for equipment which it was in a position to supply. The fact that so much trouble was encountered with the Allis-Chalmers Company in securing the water wheels overshadowed the fact that General Electric delayed the delivery of switchboards and that its generators gave trouble from vibration when first installed. A small claim for damages was collected from General Electric in 1910 at the same time that final settlement was made for damages with the Allis-Chalmers Company.

The coming of a new general manager in 1908, who enjoyed the confidence as an operating man of all interested parties, had introduced a new element into the situation. He had been trained in the Ontario Power Company plant at Niagara where Westinghouse equipment had been used, as it had been at the original Niagara Falls Power installation. He shared the prevalent confidence[14] of engineers in the Westinghouse Company. He resisted strongly the established practice in the Company of giving all possible orders to General Electric. Thus he wrote in December, 1910:

" . . . regarding the testing transformer . . . specifications were sent out to the General Electric, Westinghouse and Allis-Chalmers Companies; and the prices quoted were $820, $680 and $756 . . . The agent of the General Electric Company seemed to take it for granted that we would order this transformer from him, irrespective of price or any other conditions . . . It would seem from this, and other things of a similar nature which have occurred recently, that the G. E. Company has the impression that we are going to buy from them irrespective of price . . . there is no particular reason why we should favor the Company to the extent of presenting them with money which we could use to just as good advantage as they could."

Saltonstall proceeded to educate him by pointing out the friendship of the General Electric Company, the presence of their officers among the underwriters, and said further:

"At the time the General Electric Company was readily giving the Power Company credit directly and indirectly in 1907, the Westinghouse Company was in the hands of a receiver and the Allis-Chalmers Company was at a very low ebb financially!"

In 1911 he wrote to another officer in Duluth:

[14] The prestige of the Westinghouse Company among electrical engineers was high before 1910, largely because of the Niagara work and its long lead in furnishing street railway equipment. To trace the steps by which Coffin gradually overcame this lead by giving free hand to his technical staff (Steinmetz et al.), by placing full power in the hands of an organizing genius, S. Z. Mitchell, to develop Electric Bond & Share, and by developing financial "friendships" such as are discussed here, is to appreciate the little-praised genius of Coffin as an industrial leader.

"I feel strongly in regard to the contract which the Company will shortly place . . . for I feel that this order on anything approaching equal terms, should go to the General Electric Co. . . . Neither [of our operating men] can appreciate the value the General Electric Co. was to the Power Company during its financial troubles . . . I have had a long talk with officers of the company, and they all have this new order very much at heart. . . Finally Mr. Coffin is giving me splendid assistance in securing subscriptions to the Mesaba road, and I think this should be recognized, for the Mesaba line in future is likely to prove a valuable customer of the Power Company."

The manager wrote an interesting reply:

"With your statement as to the wisdom of tying up to the General Electric Company in all our purchases of electrical machinery, I cannot bring myself to agree . . . it would soon become known among other manufacturers that irrespective of price, G. E. would receive more consideration . . . and we would be practically at the mercy of any bid G. E. chooses to make us . . . "

The most important item in the new station, for transformers, was awarded to the Crocker-Wheeler Company, on a price of $22,971 against G. E.'s $32,475. Saltonstall admitted regretfully that this difference could not be ignored, but went so far as to question the design of the Crocker-Wheeler unit and backed up the suggestion of G. E. that an independent engineer make a report. One was secured, by Buck of Viele, Blackwell & Buck, entirely approving the new and better design of the Crocker-Wheeler Company, based on new European methods. The contract for a switchboard and miscellaneous apparatus went to G. E. at a price of $10,182. The Power Company manager commented: "We could have purchased equivalent apparatus from the Westinghouse Company at $7,270 so that we are paying the General Electric Company $2,912 more than we could have obtained this for elsewhere."[15]

The Sale of Power

The original contracts with railway and lighting companies had been evolved to meet competition of local steam power (made from relatively high-cost coal resulting from Duluth's location) with proper weight given to the variation between average and peak usage of power. Certain refinements of power rate-making were unknown in 1905. In correspondence concerning rates in this period, there is, for example, no comprehension of the effect of diversity factor—the contribution of each of the power users to the simultaneous yearly peak of the plant. But there was full appreciation of load factor and of the effect of the maximum peak load in assuming new contracts. The Duluth Edison Company rate was $2.25 per month for each average horsepower used plus $1.10 for each horsepower of the maximum five-minute peak during the month, less a complicated discount[16] for the fact that a five-minute peak might be abnormal. In actual practice in the early years this amounted to about 9 mills per kwh. delivered at a substation, but the lighting company was forced to pay the cost of changing the delivered current to 60 cycles from 25. In 1910 and 1911 there was debate

[15] A similar example of another kind of favoritism appeared in 1911, when the vice-president of the Company attempted to buy aluminum wire for a small new transmission line. As the result of much correspondence, the contract was rescinded in favor of copper, chiefly as the result of protests by directors Cole and Duncan, who were heavily interested in several Montana copper companies.

[16] This allowance was $.00003 times the square of the peak, being about ½ of 1% of the peak charge. In the miscellaneous rates for smaller users, where a higher peak charge was imposed, a higher discount was used—$.002 times the square of the peak, amounting to about 20% of the peak charge. No reference to such a discount can be found in the rate literature of the period. In later years the 30-minute peak has come to be used, with no discount, as a fairer charge basis than five minutes.

over the fairness of this rate to the lighting company, and it was slightly lowered in 1917. The rate to the railway company, which had a higher evening peak, worked out to be about one cent per kilowatt-hour.

The Carbolite Contract. The three basic contracts with the Duluth and Superior light companies and the street railway, upon which the promotion had been based, promised to cover nearly all fixed charges, according to the known peaks and average use of the three companies. The only immediate need in the fall of 1905 was thus for a contract that would cover operating expenses—labor, repairs, and maintenance, then estimated to total about $60,000 a year, compared with fixed charges of about $250,000. As it turned out, this estimate was far wrong, and operating expenses in the first year were about $100,000 and grew by 1910 to $125,000.

Although the seasonal decline in water flow in the winter months was underestimated by the promoting engineers and the several consulting engineers, its existence had been realized. Hence, in the Duluth Edison contract there was a provision whereby the latter's steam station would be kept in repair, ready for operation in December-February if necessary, the cost to be borne by the Great Northern Company. The Duluth group knew any other contract would have to avoid this winter peak demand on the plant and avoid increasing the high operating cost of the steam plant. Later correspondence about reservoirs indicates that there was at this time a vague plan of increasing reservoir capacity as contracts were added. But the problem in 1905 was an increase in income with no increase in peak load. The solution was a true case of pioneering, in view of the slight use and knowledge of electric power in industry at that time.

Electro-chemical plants had become by 1905 the mainstays of the Niagara plant, with its steady 24-hour, year-round flow of water. Hence it was natural that the Great Northern promoters and officers should turn to such an industry to obtain the type of contract they sought. President Duncan had been in touch with an inventor-promoter named Hartenstein in Constantine, Michigan during the fall of 1905. He was making calcium carbide (under the trade name "carbolite") in competition with the Union Carbide Company. Early in January a contract was signed.

As originally signed, the contract called for a price of $30 per kw. annually, for a total reserved capacity of 2,000 kws. In addition, an equal reserved capacity was to be sold as "restricted power" at a price of $12. At its own option, the Power Company could restrict the use of this second block of power to 18 hours daily, and so avoid the evening peak. In 1908, when the Carbolite concern was in difficulties,[17] the price on the unrestricted block of

[17] Without much investigation of Hartenstein's patent position, Duncan had invested about $20,000 in the small concern, and at his request, Saltonstall put in $10,000 on behalf of Tucker, Anthony & Company. The moving of the plant, experimental work, and delay in receiving power till the beginning of 1908 brought the company into difficulties. From the summer of 1908 on, Duncan dominated the consuming company while remaining as president of the Great Northern Company.

In 1908 an engineer representing the Harkness and Warden group argued in his report that the contract was unfavorable because higher rates could be obtained from other users in Duluth. Duncan replied that the contract had supplied about 20% of the gross in 1908–9 and had tided over the power company in its first year of operation under low-water conditions. Unquestionably, control over the customer was of great benefit to the Power Company, a position which many similar enterprises have wished for. The engineer also questioned the patent position of the Company, and feared a suit by Union Carbide; at two different times in 1910

(Footnote 17 continued on page 186)

power was reduced from $30 to $18. In negotiating with the various companies at Niagara Falls, Hartenstein had been offered a flat price of $18 for one block of power. In addition, the Company could sell its new customer any additional off-peak power at the $12 rate.

The kilowatt-hour rate received from Carbolite during 1910, after the revised contract was in force, averaged out at 1.524 mills per kwh. for power actually delivered over an eight months' period. Its gross payment averaged $5,790 per month, out of total receipts of $35,000. In these same years, other power sales averaged 9.6 mills per kwh. But it was difficult in 1906-12 to secure other customers at rates which would have compensated for their probable presence "on peak"; in contrast, Carbolite was using as high as 7,000 kw. in the spring months, of which only 2,000 was peak power. Because of the close connection between the two concerns, this peak commitment was not absolute. On at least two occasions in the early years, delivery to Carbolite was suspended; with an ordinary customer this would have involved money compensation. During 1909 and 1910, Carbolite receipts more than covered expenses of maintenance and other operating expenses. The other contracts just barely covered fixed charges.

As late as 1911, Carbolite was absorbing over ½ the spring maximum capacity of the plant. New power users were still hard to find. Less than 15% of revenues was coming from "miscellaneous" users—coal docks, machine shops, and flour mills. To sell power, a customer had to be convinced that he would save money as against the use of steam power and that electric equipment would be as efficient and reliable. The sale of power was thus competitive in the true sense. Progress was slow and disappointing and was reflected in the failure to pay any preferred dividends up to 1914, when the accumulation was funded by an issue of new stock. Even after an extension of territory to the Mesaba Range, the addition of an interurban electric line, and a gradual increase in business elsewhere, earnings rose slowly. The preferred stock sold at only $50 per share in 1913-14. The common had only nominal value for many years, rising to about $10 in 1913–14.

In the period 1917–21 the Company's position rapidly improved because many 10-year contracts for power expired and were renewed at about 30% higher rates. The Carbolite contract in 1918 was renewed on the basis of 1½ mills per kwh. for excess off-peak power only, with no reservation of any fixed block. The contracts with other local utilities remained at the same prices. Capacity was doubled by 1921, and the Company was finally able to develop a fair earning power. Its power sales were still competitive, but were aided by higher coal prices in 1917–1920 and by increasing efficiency and reliability of electric prime movers; but such improvements did not change the essentially competitive nature of power selling. Gross earnings grew to $1,300,000 in 1918 from about $375,000 in 1909. In 1920 they were over $2,000,000, and net in 1920 was more than double that of 1918. It was as a profitable property that the Company was ab-

(Footnote 17 continued from page 185)

he suggested to Harding that the latter secretly approach Union Carbide to arrange terms of buying out Carbolite. Duncan's local pride and hopes for later profits made him obdurate against any plan that would involve closing up the Duluth plant even though a good price were secured. His policy turned out to be wise, for the concern made excellent profits up to the time of its final purchase by Union Carbide in 1923, and was a steady power user when other contracts were hard to find.

sorbed in 1922 by American Power and Light Company, after 15 years of difficulty and low earnings. Preferred stock of American Power and Light was exchanged for both the preferred and common stock of Great Northern Power Company.

Conclusion

The history of this Company presents in detail and for one case many of the influences that marked the development of electric power in the period before 1915. Its formation was heavily influenced by the example of Niagara, and the management problem of its sponsors is to be sharply distinguished from the much simpler task of promoters of city lighting companies. It was essentially a *power* project and not a concern interested solely in the monopolistic lighting business in a specific community; as such the Company was forced to sell its power in competition with steam plants, a task which was by no means an easy one until after the War period. Many of its early problems were entirely different and far more difficult of solution than those which have faced public or private utilities since 1921. Its ability to rely upon engineering knowledge and upon satisfactory equipment was nearly *nil* in the early years, and a constant fight was necessary to secure effective operation. Finally, no large profits on the investment accrued until after 1919, and the salaries and fees of management were undeniably earned by worry, hard work, and planning without the aid of a fund of experience in power problems. In such a situation, favoritism toward the General Electric Company, a helpful guide in many of the problems encountered, may have been entirely justifiable.

III. Some Problems in State Regulation of Natural Gas Utilities

By C. EMERY TROXEL*

SEVERAL problems, such as valuation of natural gas leaseholds or gas acreage, annual depletion allowances for amortization of the value of gas field developments and gas-producing leaseholds or land; treatment of gas well-drilling costs; and disposition of revenue from natural gasoline are regulatory matters which are encountered exclusively in the natural gas industry. These special regulatory characteristics arise because each unit of natural gas service is a portion of an irreplaceable natural resource. Studies of public utility regulation usually treat in general terms such matters as valuation, rate of return, and depreciation. This article will be devoted to consideration of the peculiarities of the natural gas industry with respect to these problems.

These regulatory matters, moreover, will be encountered by the Federal Government if federal regulation of interstate gas pipe lines, the subject of a previous article, is realized.[1] While many long-distance and interstate gas lines purchase their gas from unaffiliated producers under long-term contracts, others hold directly or through affiliated companies large amounts of developed and undeveloped gas leases and land. In the Texas Panhandle field, for instance, about 60% of the proven area is controlled directly or through affiliated companies by six interstate pipe-line companies originating in the field.[2] Affiliated gas-producing companies of the Natural Gas Pipe Line Company of America (the Chicago line) alone have expended about $15,000,000 in obtaining gas acreage in the Panhandle field.[3]

Valuation of Natural Gas Acreage

Although many pipe lines and natural gas utility systems purchase gas on long-term contracts from gas producers not affiliated with these companies, several of the larger natural gas systems control large amounts of operated and unoperated gas land, chiefly by leases and to a minor extent by ownership of land or gas and mineral rights. When the amount of natural gas acreage held by a system is large, the valuation

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[1] Troxel, C. Emery, "Regulation of Interstate Movements of Natural Gas," 13 *Journal of Land & Public Utility Economics* 20 (February, 1937).

On March 17, 1937 Senator Brown and Representative Crosser introduced identical bills (S. 1919 and H.R. 5711), which are being backed by the Cities Alliance, proposing regulation of interstate gas pipe lines. Although under all proposals the Federal Power Commission would be the regulatory body (the author should have reported that H.R. 4008 proposed control by the Federal Power Commission, *Ibid.*, p. 30), the foregoing bills differ in several respects from Representative Lea's H. R. 4008. More attention is given use of state compacts for gas conservation; a pipe-line company would choose between being a common carrier and ratable purchasing of gas—this provision is apparently aimed at conditions in the Texas Panhandle—and the Commission would be empowered to determine adequacy of gas reserves and delay rental allowances; but no control of pipe-line construction is provided.

If regulation of these lines is enacted, further comments on the law will appear in a later issue of this *Journal.*

[2] Committee on Interstate and Foreign Commerce of House of Representatives, Hearings on H.R. 11662, 74th Cong., 2d Sess., pp. 118, 123.

[3] *Ibid.*, p. 109.

of this land is a significant part of the rate-fixing process. Operated and unoperated gas acreage controlled in 1934 by several of the leading natural gas systems was as follows:[4]

Company	Operated Acreage (000 Omitted)	Unoperated Acreage (000 Omitted)	Total (000 Omitted)
Columbia Gas & Elec. Corp.....	826	3,538	4,364
Standard Oil Co. of N. J.....	616	1,871	2,488
Cities Service Co..	.....	.....	2,682
United Gas Pub. Serv. Co.....	229	1,199	1,428

It is not unusual for company estimates of gas land and leasehold valuation to exceed the amount of the rate-base sought for all other tangible and intangible items. Occasionally, company estimates of the value of developed and undeveloped leases will be as much as 50 or 60 times the cost of leases. An extreme instance is shown in the following company value-estimates, the net cost of these rights being only $251,005.78:[5]

Item	Acres	Estimated Value
Class 1. Leases on which there are producing wells.....	75,541	$ 4,453,334
Class 2. Leases near producing wells, proved to be reasonably certain of gas wells....	119,760	6,240,757
Class 3. Leases near producing wells and reasonably certain of production.....	156,517	2,106,774
Class 4. In gas regions but only prospective gas lands.....	553,256	1,199,135
Total Estimated Value...	.....	$ 14,000,000

[4] Federal Trade Commission, *Utility Corporations*, Doc. 92, 70th Cong., 1st Sess., Pt. 84-A, p. 75. The author has estimated the 1933 acreage holdings of the Cities Service Co. at 4,437,360; H. L. Doherty's Dokenva Corp. holdings account for the difference in these acreage estimates. Figures for total 1935 acreage holdings of these systems are available in Poor's *Public Utilities*, 1936; but there is no separation of these 1935 data into operated and unoperated acreage.

Testimony of a natural gas company's witnesses, furthermore, is likely to show a wide range of value-estimates for gas lands. Sometimes the highest valuation of a company witness is as much as 100% more than the estimate of another company witness.[6] Some of these valuations by experts have, in fact, the appearance of bald, empirical guesses.

Most of the cases involving these problems have arisen in eastern states, and for two reasons. First, the cost of gas at wells in eastern states has gradually increased to a level which is higher than elsewhere in the country. Value of gas lands, as a consequence, has become a more significant part of rate-bases which are sought by utility companies. Second, natural gas systems in eastern states commonly have affiliated gas-producing companies. As the field price for natural gas increases and as sale of gas by contract declines,[7] a similar struggle between public service commissions and natural gas utilities may arise in western and southwestern states.

Gas Land and Leases Allowed in the Rate-Base

Before a valuation of natural gas acreage is fixed, commissions may determine how much reserve acreage, operated and unoperated, should be permitted a natural gas utility. In brief, a return on value of gas lands not

[5] *Re Logan Gas Co.* (Ohio), P.U.R. 1929 A 232. More commonly, however, company valuation estimates of gas lands are 10 to 30 times as great as the cost of the leases.

[6] In *Dayton Power & Light Co. v. Pub. Util. Com. of Ohio*, 3 P.U.R. (N.S.) 279, 292 U.S. 290 (1934), the valuation of the leases by company witnesses ranged from $11,000,000 to $26,200,000.

[7] The field price for gas generally ranges from 15 to 20 cents per MCF in eastern gas fields and from 3 to 8 cents per MCF in western and southwestern fields.

reasonably necessary for future service would increase inordinately the cost of gas service. State commissions occasionally have questioned the large amount of reserve acreage possessed by natural gas companies, or they have denied allowance of "delay" rentals[8] on a portion of the undeveloped acreage. "At times," said Mr. Justice Cardozo in the Columbus Gas & Fuel case, "the immediate purpose of buying up extensive tracts is to forestall or stifle competition that might bring prices down."[9]

In only a few cases have state commissions refused to allow inclusion of delay rentals on a portion of unoperated gas acreage in fixing rates for natural gas service. The Oklahoma Corporation Commission eliminated ". . . unwise and reckless expenditures . . . " on natural gas leases.[10] The West Virginia Commission in 1918 made the following comment on delay rentals on an excessive amount of undeveloped acreage:[11]

"We do not deem it necessary for the security of applicant's business that it control all probable gas territory in reasonable proximity to its production field or transmission lines . . . Under these circumstances we are of opinion that applicant should only carry at the expense of its consumers such undeveloped land as will insure uninterrupted service and an adequate supply of gas under a reasonable forecast of future conditions."

Similarly, the Ohio Commission, which expressed the following opinion, has denied in recent years inclusion of delay rentals on "unneccssary" leases:[12]

"Granting that a forward looking policy is commendable and that a future supply of gas should be assured, if possible, common sense alone would seemingly deny any public service company the right to pyramid its reserve holdings at will and compel current users of a commodity to assume the financial burden entailed when it is certain that little, if any, of the additional acreage will benefit them."

The United States Supreme Court has not yet given an opinion directly upon allowance of delay rentals on only a portion of the reserve acreage. In the Dayton Power & Light case the Court believed the Ohio Commission's " . . . amortization allowance of $4,158,954 has made provision for a fund whereby new leases can be acquired and paid for out of current earnings."[13] In other words, the depletion allowance, a problem to be treated subsequently, was considered adequate to cover also delay rentals.

For at least three reasons it would be no simple task for a regulatory body to prescribe the amount of gas acreage which would provide a natural gas company with an adequate gas reserve. First, the ever-present depletion of gas pools makes imperative the acquisition of a gas reserve sufficient to serve at least a part of future customer needs. Many productive gas pools have been discovered in "wildcat" areas, while

[8] "Delay rentals" are the periodic, usually annual, payments on leaseholds prior to the time of gas production.

[9] *Columbus Gas & Fuel Co. v. Pub. Util. Com. of Ohio*, 4 P.U.R. (N.S.) 152, 292 U.S. 398 (1934). In *Wichita Gas Co. v. Kan. Pub. Serv. Com.* (2 F. Supp. 792; P.U.R. 1933 B 225) this opinion was given: ". . . The commission was not empowered to substitute its judgment for that of the officers and directors of the Cities Service Gas Company as to the amount of leases necessary to afford an adequate gas reserve, in the absence of a showing of abuse of discretion by such officers in that regard."

[10] *Re Western Natural Gas Co.* (Okla.), P.U.R. 1919 B 76.

[11] *Re United Fuel Gas Co.*, P.U.R. 1918 C 194.

[12] *Re Logan Gas Co.*, P.U.R. 1929 A 232. This Commission subsequently reiterated its denial of payment of "delay rentals covering leases not necessary for current business." (*East Ohio Gas Co. v. Cleveland*, 4 P.U.R. (N.S.) 433 (1934). (Similarly the Ohio Commission later denied inclusion of rentals on unoperated gas leases in testing reasonableness of rates (*Re Logan Gas Co.*, 7 P.U.R. (N.S.) 342 (1935).)

[13] *Dayton Power & Light Co. v. Pub. Util. Com. of Ohio*, 3 P.U.R. (N.S.) 279; 292 U.S. 290 (1934).

other seemingly promising gas lands have provided only modest amounts of gas. Thus, purchase of natural gas leases is a speculation, which may find eventually much of the leased land returned to its owners.

Second, and this point further softens Mr. Justice Cardozo's condemnation of acquiring acreage "to forestall and stifle competition,"[14] companies may justifiably lease or purchase a larger than immediately needed reserve to prevent interference or wasteful competition from independent producers. If several unaffiliated interests control the acreage of a prospective gas pool, an independent producer may immediately begin development of his leases. The independent, consequently, may force purchase of his leases and wells by the utility company for their "nuisance" value; or the utility company may be obliged to invest prematurely in field developments including offset wells and other wasteful field developments.

Finally, allowance of carrying costs on part of an unoperated reserve is related to the cost-of-reproduction part of "fair" value. Commissions apparently have been apprehensive of company demands for an enhanced rate-base, as will be described later, because of market and field developments showing an increased cost of acquiring gas leases or land. Commissions, therefore, occasionally have preferred to deny allowance of expenses on at least a portion of unoperated acreage since companies may be expected to cover these costs subsequently with rate-base increments in acreage value.

Although neither commissions nor courts have regularly required a reduction in reserve gas acreage, or refused to allow delay rentals and other costs of reserve acreage, they have often questioned inclusion in the rate-base of an estimated value of unoperated or undeveloped gas land or leases. Obviously, it would be difficult to determine the value of reserve acreage if no gas wells had been drilled to show presence or absence of natural gas. Prevailing methods of gas-reserve measurement require some knowledge of the limits or rate of production of a gas pool. Public utility operators, moreover, have not been satisfied to demand inclusion of unoperated land or leases at cost, because the bulk of actual or prospective gas-producing land is leased and only a nominal, if any, initial payment is made on many leases. In fact, these initial payments, even the purchase price of gas and oil rights, are often sufficiently slight that they might be considered operating expenses rather than a part of the rate-base.

Until a leasehold is developed, state commissions and courts have usually held that treatment of delay rentals as operating expenses represents ample allowance; they have not attempted to estimate the value of these leaseholds in order to permit their inclusion in the rate-base. Believing that " . . . to attempt to value undeveloped natural gas leaseholds is to invade the realms of uncertainty and conjecture . . . " state commissions usually " . . . will not permit the capitalization of these leaseholds."[15] They have ordered, therefore, that these costs be charged to

[14] *Supra*, n. 9.

[15] *Re Independence Natural Gas Co.* (Mo.), P.U.R. 1923 D 433. See also *Re Northwestern Oil & Gas Co.* (Ohio), P.U.R. 1916 D 692; *Re Pawhuska Oil & Gas Co.* (Okla.), P.U.R. 1917 D 947; *Re Clarksburg Light & Heat Co.* (West Va.), P.U.R. 1917 A 577; *Re United Fuel Gas Co.* (West Va.), P.U.R. 1918 C 194; *Oklahoma Natural Gas Co. v. Oklahoma Corp. Com.* (Okla. Sup. Ct.), P.U.R. 1924 A 132, 216 Pac. 917; *Charleston v. Pub. Serv. Com.* (West Va.), P.U.R. 1924 B 601, 120 S.E. 398; *Logan Gas Co. v. Pub. Util. Com.* (Ohio Sup. Ct.), P.U.R. 1930 B 246, 169 N.E. 575; *Re Logan Gas Co.* (Ohio), 7 P.U.R. (N.S.) 342 (1935).

operating expenses as illustrated by the following statement:[16]

"An undeveloped oil and gas leasehold cannot fairly be regarded as tangible property. It merely invests the lessee with authority to enter upon the land, prospect for and acquire or produce oil and gas . . . While it seems proper to require that the carrying charges upon all these leases shall be paid as a current operating expense, the investment cost of obtaining them should in this case, be spread over and amortized within the period such leases will be used and put into production."

Among the decisions examined, several have expressly allowed undeveloped gas leases or land to be included in the rate-base. In allowing a leasehold value of $20 per acre, the Montana Commission made the following statement on the value of undeveloped leases:[17]

" . . . What they will or may produce, and earn, is recognized as too remote to warrant a guess at proper capitalization, but as 'potentials' they have a present value, and whatever that value is their owners may capitalize and if the owners are engaged in a public service . . . it is a proper capital charge therein."

Although the Pennsylvania Supreme Court permitted inclusion of only "developed, used and useful" holdings in the rate-base, it believed that the value of a " . . . reasonable reserve for continued functioning of the company in its public service . . . " might also be included in the rate-base.[18]

In the Columbus Gas & Fuel case the Supreme Court was asked to decide relative to value of undeveloped gas land. Mr. Justice Cardozo succinctly summarized the Court's position in these words:[19]

"There will be no need in the computation of the rate base to include the market or the book value of fields not presently in use, unless the time for using them is so near that they may be said . . . to have the quality of working capital . . . Leases bought with income . . . and thus paid for in the last analysis through the contributions of consumers ought not in fairness to be capitalized until present or imminent need for use as sources of supply shall have brought them into the base . . . "

Thus, the Supreme Court has confirmed the opinion of nearly all state commissions, that undeveloped gas leases or land may not be included in the rate-base unless the time for their use is imminent.

Valuation of Developed Gas Land

As soon as gas is discovered on a leasehold or land owned in fee, the market price of this land will increase immediately if a market for gas exists. Natural gas utilities believe, therefore, that they have an enhanced rate-base value as a result of gas developments on leased or owned land.[20] State commissions, naturally, have objected strenuously to inclusion of this asserted value increment, seeking instead to apply cost or fair "book value" of the gas lands or leases as the fundamental valuation principle.[21]

[16] *Re United Fuel Gas Co.* (West Va.), P.U.R. 1920 C 583.

[17] *Re Baker Natural Gas Utility*, P.U.R. 1921 E 609. Often, particularly in earlier cases, no consideration was given undeveloped gas leases or land. Not infrequently, however, a lump sum rate-base allowance was made for all gas land and leases.

[18] *Erie v. Pub. Serv. Com.*, P.U.R. 1924 D 89. See also *Re Cities Service Co.* (Kas.), P.U.R. 1933 A 113.

[19] *Columbus Gas & Fuel Co. v. Pub. Util. Com. of Ohio*, 4 P.U.R. (N.S.) 152, 292 U.S. 398 (1934). See also *Columbus Gas & Fuel Co. v. Pub. Util. Com.*, P.U.R. 1933 D 238.

[20] Neither courts nor commissions have distinguished between ownership of land or gas and mineral rights and leased gas and oil rights in these valuation cases. Because of the dominance of leases compared with ownership holdings, valuation of the acreage is principally in terms of leaseholds.

[21] None of the cases involving gas acreage valuation have considered exaggeration of original cost through book value write-ups, which are either arbitrary or a result of corporate consolidation or reorganization. United Fuel Gas Company, for example, has written-up book value of its gas acreage $41,042,462. (Federal Trade Commission, *op. cit.*, p. 349.)

This cost of gas land includes payment for purchased land or gas rights as well as any initial payment or bonus on leases. "Current accounting practice," as the Federal Trade Commission has said, "is to capitalize the initial cost of leases (i. e., bonus payment, incidental expenses, and the first rental payment), and to treat subsequent annual rentals as production expenses."[22] Sometimes high prices are paid for leases on proved or developed gas land. In 1930 the East Ohio Gas Company, for example, paid an independent Ohio gas producer $3,000,000 for leases on about 9,500 acres.[23] Panhandle-Eastern Pipe Line Company, however, paid from $20 to $45 per acre for leases in the Panhandle field and some leases elsewhere in Texas were obtained for $1.50 per acre.[24] Other examples of per-acre gas leasehold and land costs in the Appalachian area are:[25]

	Hope Natural Gas Co.	Peoples Natural Gas Co.
Mineral and Gas Rights:		
Operated	$ 8.16	$ 35.28
Unoperated	18.87	16.70
Leaseholds:		
Operated	3.57	2.93
Unoperated	1.09	.25

There can be no cost of reproduction of gas-producing land in the generic sense, because natural gas reserves can never be replaced. Consequently, valuation of leaseholds and lands owned in fee cannot be based on the same legal or economic claims presented in cases involving other types of public utility property. Instead, natural gas companies have demanded a rate-base measure which they prefer to call "present value" of gas reserves,[26] unless the commission or company attempts to reach the same valuation through a determination of present cost of repurchasing these holdings.[27] The usual sale for natural gas by companies seeking a high gas-acreage valuation, particularly in eastern states, is as public utility service.[28] Circuitous reasoning is involved in this present-value method of valuation. The legally established rate-base determines, in part, the price to be received per MCF of gas, and this price per unit of gas becomes the measure for calculating the "present value" of a part of the rate-base—the gas-producing land. Some commissions and courts have recognized this circular valuation process.[29]

Except for a few early cases, state commissions have endeavored to employ cost instead of "present value" as the basis of valuing gas leases and land used to furnish public utility service. At the insistence of state and lower federal courts, commissions often have been

[22] Federal Trade Commission, *op. cit.*, Part 84-A, p. 74. Annual delay rentals vary from a few cents to two dollars per acre. Payment of royalty to fee owners of gas-producing land may be either (1) a fraction, commonly ⅛, of revenue from gas produced and/or (2) a fixed sum per producing well per year, which is generally $200 to $300 per well in the Appalachian area.

[23] *Ibid.*, p. 79. To the Federal Trade Commission this purchase had the "earmarks of action . . . to forestall competition."

[24] *Ibid.*, Part 83, p. 740.

[25] *Ibid.*, Part 84-A, pp. 302-3. Data compiled for December 31, 1934.

[26] Somehow the Oklahoma Corporation Commission ". . . finds that there is an actual sale value for this company's gas at its well heads of at least 7½ cents per thousand cubic feet with willing purchasers on hand ready to buy." When 7½ cents was multiplied by estimated reserves, a value for leaseholds was ascertained. (*Re American Indian Oil & Gas Co.*, P.U.R. 1928 C 815.)

[27] *Re Logan Gas Co.* (Ohio), P.U.R. 1930 D 451.

[28] The United Fuel Gas Co. unsuccessfully suggested that this increased value may be fairly ascertained by determining the industrial market rates for gas in Pittsburgh and elsewhere (*Re United Fuel Gas Co.* (West Va.), P.U.R. 1925 B 705).

[29] *Natural Gas Co. of West Va. v. Pub. Serv. Com.*, P.U.R. 1924 D 346, 121 S.E. 716; *Re Cumberland & Allegheny Gas Co.* (West Va.), P.U.R. 1928 B 20; *Re United Fuel Gas Co.* (West Va.), P.U.R. 1925 B 705; *Re Logan Gas Co.* (Ohio), P.U.R. 1929 A 232.

obliged to alter their valuation yardstick, that consideration be given "present value" of developed gas leaseholds and land. Recent United States Supreme Court decisions suggest that cost of gas leases or land is a more acceptable valuation basis than questionable estimates of "present value."

Before 1920 public service commissions of eastern states gave only scant consideration to the task of valuing operated or developed leases or land. The Ohio Commission concluded that it was "extremely difficult to find any fair basis on which to calculate the value of gas leases . . . "[30] In 1919 the West Virginia Commission stated the following opinion which may be contrasted with contemporary decisions:[31]

"If one has been fortunate in purchasing or leasing undeveloped or partially developed territory at a remarkably low figure and by subsequent energy and labor, developed said territory, thereby making a 'sure thing' out of a probability and materially enhancing the value thereof, he is certainly entitled to that increased value even though, as suggested, it may be difficult to ascertain definitely what that increased value is."

Similarly, one year after the above decision the West Virginia Commission allowed one company a leasehold value of $50.00 per acre as a "reward . . . for the business acumen and foresight of its officers . . . "[32]

In 1920 the United Fuel Gas Company sought a rate increase and when it presented as part of the rate-base a sum for leaseholds that exceeded all other valuation items, the West Virginia Commission allowed inclusion of the leases at only their cost.[33] In several subsequent cases the West Virginia Commission maintained its use of cost as a measure of value of natural gas leaseholds.[34] In 1933 the West Virginia Commission, at the insistence of the courts, however, found a " . . . minimum market value of the leases . . . "[35] After calculating a valuation based on value per acre, the Commission deducted therefrom delay rentals to determine the final value of leases for rate-making purposes. Thus, in West Virginia, regulation of natural gas utilities has been made difficult because of uncertainty and variations in the method of valuing gas lands. The attitude of the United States Supreme Court on this point, which will be presented shortly, may permit the West Virginia Commission to follow its desire to value natural gas lands at cost.

Recently the Ohio Public Utilities Commission expressed a desire to value "used and useful" natural gas acreage holdings at their cost,[36] but the Ohio Supreme Court remanded the case because it believed ". . . that the value should have been determined by the

[30] *Re Northeastern Oil & Gas Co.* (Ohio), P.U.R. 1916 D 692.

[31] *Re Clarksburg Light & Heat Co.* (West Va.), P.U.R. 1917 A 577.

[32] *Re West Virginia Central Gas Co.*, P.U.R. 1918 C 453. Delay rentals, which had been included in operating expenses, were deducted from the valuation figure for leaseholds. In Montana the valuation of leases as a part of the rate-base was calculated on the basis of $20.00 per acre (*Pub. Serv. Com. v. Montana Petroleum Co.*, P.U.R. 1924 B 364). See also *Re Baker Natural Gas Utility*, P.U.R. 1921 E 609.

[33] *Re United Fuel Gas Co.*, P.U.R. 1920 C 583.

[34] *Re United Fuel Gas Co.*, P.U.R. 1924 A 357; *Re United Fuel Gas Co.*, P.U.R. 1925 B 705; *Re United Fuel Gas Co.*, P.U.R. 1932 B 61; *Wheeling v. Natural Gas Co. of West Va.*, P.U.R. 1933 D 1; *Re Cumberland & Allegheny Gas Co.*, P.U.R. 1928 B 20. In two of these cases the West Virginia Supreme Court of Appeals (*Natural Gas Co. of West Va. v. Pub. Serv. Com.*, P.U.R. 1924 D 346, 121 S.E. 716; *Charleston v. Pub. Serv. Com.*, P.U.R. 1924 B 601) gave support to the position taken by the Commission, although in the Charleston case the Court apparently believed that somehow the increment in leasehold value should be allowed in such a manner as not to affect rates charged for gas service.

[35] *Wheeling v. Natural Gas Co. of West Va.*, P.U.R. 1933 D 1. A low value per acre was allowed for unproven area.

[36] *Re Logan Gas Company* (Ohio), P.U.R. 1929 A 232.

Commission rather than by actual cost of these leases to the company."[37] When the Commission was placed in this dilemma, it concluded ". . . that the correct way to find the value of the leaseholds . . . is to ascertain what it would cost the company to obtain the leases upon this property."[38] This was tantamount to an expression that a seemingly impossible "present value" measured by the present cost of replacement should be the method of valuing gas land. Later the Ohio Supreme Court reversed this position and held that cost should be the measure of leasehold value when the market price of leases cannot be determined, because ". . . there is no market for a gas property so extensive as that of the Ohio Fuel Gas Company."[39]

The Pennsylvania Public Service Commission, with approval of the Pennsylvania Superior Court, pronounced vaguely that ". . . the value of any mineral land must necessarily depend upon demand, quantity, cost of production, and price received for the marketed product."[40] There appears to be no differentiation in this Pennsylvania decision between valuation of gas lands under competitive or under regulated conditions.[41]

These opinions of state commissions and courts indicate that regulatory bodies believed it proper to permit (or they were forced by courts to give) some recognition to "present value" of gas-producing lands. The general position of the United States Supreme Court upon public utility valuation seems to have been taken respecting valuation of natural gas lands. In the valuation of such lands, however, the United States Supreme Court has not applied strictly its customary yardsticks. In 1929, for example, the United States Supreme Court believed that United Fuel Gas Company's method ". . . of estimating value is without any known sanction." Until more "convincing evidence" is presented this Court asserted that no higher value than cost of the leases may be allowed.[42]

A few years later the United States Supreme Court in the following words expressed a similar opinion:[43]

"Plainly in all this [the state commission's rate-base allowance of slightly more than the cost of the leases] there has been no infringement of constitutional immunities unless a higher value has been made out by evidence too strong to be rejected. But for reasons already stated, the evidence is lacking in coercive power. Court and Commission were free in their discretion to reject as unsatisfactory the conflicting opinions of a group of friendly experts . . . This results from many circumstances, not the least of which is the probability of improved methods of production. In an industry subject to these rapid changes the prophecies of one year are likely to be overturned by the experience of the next."

The Court did not discuss merits of the methods of valuation; it was content to say that the leasehold valuations presented by the company were not sufficiently "convincing."

Although the United States Supreme Court seems to be veering toward a measurement of the value of natural gas leases on the basis of their cost, these decisions do not indicate a final policy of this Court with respect to this valua-

[37] *Logan Gas Co. v. Ohio Pub. Util. Com.*, P.U.R. 1930 B 246; 121 Ohio St. 507; 169 N.E. 575.

[38] *Re Logan Gas Co.* (Ohio), P.U.R. 1930 D 451.

[39] *Columbus Gas & Fuel Co. v. Pub. Util. Com.*, P.U.R. 1933 D 238.

[40] *Supra*, n. 18.

[41] Recently the New York Public Service Commission permitted inclusion of only "book cost" of natural gas leases; all proof of other values was rejected. (*Re Iroquois Gas Corp.*, P.U.R. 1930 D 30.)

[42] *United Fuel Gas Co. v. R.R. Com. of Kentucky*, P.U.R. 1929 A 433, 278 U.S. 300.

[43] *Dayton P. & L. Co. v. Pub. Util. Com. of Ohio*, 3 P.U.R. (N.S.) 279, 292 U.S. 290 (1934). The variability of leasehold value estimates by company witnesses apparently influenced the Court's opinion.

tion problem.[44] The Supreme Court in the Kentucky and Dayton cases did sanction, in lieu of bald estimates of leasehold values, an approximation of the "book value" or cost of these leases. In the absence of a final declaration by the Supreme Court on this valuation problem, the Ohio Commission in 1935 asserted that the Court seeks "value" instead of "cost" of gas leases, and, consequently, the utility company "... is entitled to such sum as would replace the value of the leases."[45] For Number 1 leases, i.e., developed leases, the Ohio Commission allowed a value of $850,000, although the cost of these leases was only $7,880. Until the Supreme Court renders further decisions on the point, among courts and state commissions there will be no established method or principle for valuation of developed gas leaseholds.

If cost were conclusively fixed by courts and commissions as the proper basis for valuation of operated gas leases owned by utility companies, the total return obtained on such valuation would be nominal, because initial investment in undeveloped, particularly unproven, leases is customarily small. Initial payments on proven and developed leases are obviously higher than on unproven and undeveloped leases. In fact, use of cost as the yardstick of gas leasehold or land valuation would usually result in such a small annual return on value that cost of leases and land might best be treated as operating expense at the time of acquisition.

Of significance in an attempt to clarify the problem of leasehold valuation (this does not pertain to land owned in fee or to ownership of mineral rights) is payment of delay rentals out of operating revenue.[46] The West Virginia Commission, as illustrated by the following comments, questioned payment of delay rentals and royalties as operating expenses and inclusion of leases in the rate-base after the discovery of gas:[47]

"It appears inconsistent . . . to eliminate its gas well construction account from the rate base . . . because the charges therein have all these years been included in operating expenses for which provision was made by rates, and, in the same case, insist upon an appreciation of 800 per cent in valuation of its gas leaseholds for which provision was made by way of rates . . . of $1,092,744 for lease rentals and gas well royalties."

These rentals on undeveloped leaseholds are paid by gas consumers. Since land held under these leases may or may not contain gas, and because this risk is borne by consumers through payment of delay rentals, it would seem inequitable to ask customers to pay a return on a high valuation of leases which become productive of gas after these initial expenditures. If natural gas utilities are allowed a higher leasehold valuation than cost, it would be advantageous for these companies to lease abundant amounts of prospective, even remotely prospective, gas-producing land. Thus, a natural gas company, after elimination of leases which do not contain gas, would be assured without cost to its investors an ample future gas supply and a high valuation of developed leases.[48] In one instance, because of continual turnover of leases, only cost

[44] On the basis of these two Supreme Court decisions the Ohio Commission applied cost as a measure of leasehold valuation (*East Ohio Gas Co. v. Cleveland*, 4 P.U.R. (N.S.) 433 (1934)).

[45] *Re Logan Gas Co.*, 7 P.U.R. (N.S.) 342 (1935). Five years earlier the same valuation was placed on Number 1 leases (*Re Logan Gas Co.*, P.U.R. 1930 D 451). See also *Re Cities Service Co.* (Kas.), P.U.R. 1933 A 113.

[46] The same point was presented previously in discussion on allowance of delay rentals on "unnecessary" reserve acreage.

[47] *Re Clarksburg Light & Heat Co.*, P.U.R. 1928 B 290. See also *Re United Fuel Gas Co.*, P.U.R. 1924 A 357.

[48] Often there is a large turnover of gas leases. It is

(*Footnote 48 continued on page 197*)

of leaseholds was allowed in the rate-base.[49]

It should be observed that fortunate gas field developments will occasion an increment in value of land of unregulated natural gas-producing companies which sell gas under contract to an unaffiliated natural gas utility. It is undeniably true, moreover, that a public service company would, if its productive gas lands were sold, obtain more than cost of the land. These market value increments on one hand and likelihood of circuitous reasoning, plus payment of delay rentals by gas customers on the other, partially explain the dilemma of state commissions regarding valuation of operated natural gas leaseholds or land.

Well-Drilling Costs

Another common item in a natural gas utility's rate-base is well-drilling cost. State commissions have customarily allowed either payment for gas well drilling from operating revenues or capitalization of these costs.[50] It has been common procedure for natural gas companies to charge as much as ⅔ to ¾ of well-drilling costs to operating expenses.[51] This division of well-drilling expenses has been approved by state commissions wherever the problem has been faced.[52] Additional and sometimes extensive drilling to offset declining gas production has been termed an operating expense by the West Virginia Commission.[53] Costs of drilling which have resulted in only "dry holes" have been approved also, either as an operating expense or as a part of the rate-base.[54] But natural gas utilities have been permitted to include in the rate-base only the value of gas wells the cost of which has not been charged to operating expenses.[55] If, for example, ⅔ of well-drilling costs have been charged to operating expenses, only ⅓ of the value of the gas wells may be included in the rate-base.

Depletion Allowances

Because depletion of natural gas pools is characteristic of natural gas utilities, value or cost of gas leases or land and of property such as gas wells and gathering or transmission lines is amortized during the period of expected production from a gas pool.[56] This necessitates

(Footnote 48 continued from page 196)

reported that in a single year the Columbia Gas & Electric system cancelled 60% of gas leases held at the end of the previous year. (Committee on Interstate and Foreign Commerce of House of Representatives, Hearings on H.R. 11662, 74th Cong., 2d Sess., p. 69.)

[49] *Charleston v. Pub. Serv. Com.* (West Va. Sup. Ct. of Appeals), P.U.R. 1924 B 601, 120 S.E. 398.

[50] The discovery well of the Kettleman Hills Field in California cost about $250,000. West Virginia wells 2,000 to 3,000 feet deep commonly cost approximately $9,000 each. The average cost of 74 wells in the Texas Panhandle field was $37,800. And the average investment in 1,134 wells by Peoples Natural Gas Co. (Standard Oil of N.J. subsidiary) was $4,481 at the end of 1934. (Principally from Federal Trade Commission, *op. cit.*, Part 84-A, pp. 127, 297-307.)

[51] From 1908 to 1932 the annual percentage of "dry" holes (oil and gas combined) to the total number of wells drilled ranged from 16 to 32%. (U.S. Bureau of Mines, *Mineral Resources of the U.S.*, 1908-32.)

[52] *Re Northeastern Oil & Gas Co.* (Ohio), P.U.R. 1916 D 692; *Re West Virginia Central Gas Co.* (West Va.), P.U.R. 1924 E 24; *Re Baker Natural Gas Utility* (Mont.), P.U.R. 1921 E 609; *Natural Gas Co. of West Va. v. Pub. Serv. Com.*, P.U.R. 1924 D 346, 121 S.E. 716.

[53] *Re Hope Natural Gas Co.* (West Va.), P.U.R. 1921 E 418.

[54] *Re Logan Gas Co.* (Ohio), P.U.R. 1929 A 232. The United States District Court for Kansas reversed the Kansas Commission which had held that only the expense of drilling one "dry hole" might be included with operating expenses. The Court held that the cost of all 10 "dry holes" was a proper operating charge, even though none of these unsuccessful wells were in a proven area (*Wichita Gas Co. v. Pub. Serv. Com. of Kansas*, P.U.R. 1933 B 225).

[55] *Natural Gas Co. of West Va. v. Pub. Serv. Com.* (West Va.), P.U.R. 1924 D 346, 121 S.E. 716; *Re Clarksburg Light & Heat Co.* (West Va.), P.U.R. 1928 B 290.

[56] In earlier years state commissions occasionally granted natural gas utilities a higher rate of return than was usually allowed other utilities because of

(Footnote 56 continued on page 198)

a yearly addition to costs of operation, the amount of which will vary with the method used in valuing property and leases. Yearly allocations of value or cost of gas leases or land are usually accumulated under the caption "depletion reserve," while periodic allocations of gas field developments and other investments, all of which will decline toward scrap value as gas production of a pool or pools wanes, may be accumulated in the usual "depreciation reserve."

Since waning gas production in a field affects similarly the value of different types of property, the depletion base includes broadly speaking cost or otherwise determined value of (1) developed and operating gas leases and land, and (2) gas wells, gathering lines, other field developments, and transmission lines which would be useless after the contents of a gas pool are exhausted. No property should be included, the cost of which has been charged to operating expenses. Undeveloped leases, moreover, are not properly a part of the depletion base, because the payment of delay rentals as well as the depletion charge on such land would result in an expense duplication.[57]

Although most companies use straight-line rates to amortize their investments, many other companies allocate losses in property value by calculating annual rates of gas supply depletion.[58] Because value of field developments, gathering lines, and some transmission lines depends on existence of a gas supply, and since investments should be fully amortized when the gas supply is gone, accuracy of depletion or depreciation allowances on these investments necessitates approximation of remaining years of production for each gas pool. Amortization of these investments cannot be based on the time it will take improvements and equipment to wear out, unless this period of time is less than or equal to expected life of the gas pool.

One of the commonest methods of approximating the life of a gas pool which is known as the rock pressure method, may be described as follows: for each per-pound decline in rock pressure a measured amount of gas is extracted; thus a rough estimate of the gas reserve may be ascertained by multiplying the remaining usable rock pressure by the amount of gas withdrawn per pound of pressure decline.[59] By dividing the approximated gas reserve by the anticipated future annual withdrawals, an estimate of remaining years of gas production is obtained.

The Federal Trade Commission's studies show that depletion rates vary widely between companies and from year to year for a single company. While the annual depletion charge for some companies is computed according to a specified expense per MCF of gas produced, other companies express the charge in terms of a percentage of investment.[60] The following sample for

(*Footnote 56 continued from page 197*)

the "hazardousness of the business and the rapid depletion of its property . . ." (*Re West Virginia Central Gas Co.* (West Va.), P.U.R. 1918 C 453. See also *Re United Fuel Gas Co.* (West Va.), P.U.R. 1918 C 194; *Re Southern California Gas Co.* (Cal.), P.U.R. 1922 A 277.)

[57] ". . . . Operating expenses are magnified unduly if they cover both the fund and the payments that are made out of it." (*Dayton P. & L. Co. v. Pub. Util. Com. of Ohio, op. cit.*) A company may not be denied, however, the right to amortize the cost of or initial bonus on undeveloped leases which have proven nonproductive of gas.

[58] Federal Trade Commission, *op. cit.*, Part 84-A, p. 498.

[59] Production decline curves may be studied to approximate years of productive life in a gas pool. Also the saturation method (which is calculated with a knowledge of thickness and porosity of the producing sand, the proven size of the pool, and the percentage of gas recovery) is sometimes used.

[60] Federal Trade Commission, *op. cit.*, Part 84-A, pp. 498-506.

1934 illustrates variability of depletion allowances:[61]

	Depletion (Cents per MCF of Gas Produced)	Depletion and Depreciation Combined (Cents per MCF of Gas Produced)
Producing Companies:		
Lycoming Producing Corp.	.....	1.63¢
Kentucky-West Va. Gas Co.	5.00¢	.....
Canadian River Gas Co.	.24	2.94
Texas Interstate P.L. Co.	1.55	.....
Integrated Companies:		
United Fuel Gas Co.	1.07	.....
Pittsburgh-West Va. Gas Co.	.15	3.11
Lone Star Gas Co.	.25	7.15

State commissions and courts have customarily recognized the propriety of amortizing cost or otherwise determined value of gas acreage holdings over their estimated period of production.[62] In the Columbus Gas and Fuel Company case the United States Supreme Court supported in these words an allowance for depletion:[63]

"To withhold from a public utility the privilege of including a depletion allowance among its operating expenses, while confining it to 6½% upon the value of its wasting assets, is to take its property without due process of law, at least where the waste is inevitable and rapid . . . We hold that a fair price for gas delivered to the gateway includes a reasonable allowance for the depletion of the operated gas fields . . ."

When criticisms of the depletion charge have been made they usually relate to the value of gas leases or land being amortized. One court remarked that ". . . if leaseholds increase in value as the gas is exhausted, to be logical the company should not ask for any depreciation allowance thereon."[64] The United States Supreme Court, likewise, has asserted, ". . . that the percentage of depletion appropriate for gas fields is the wildest sort of guess."[65] Although propriety of an allowance for depletion was not denied in the latter case, the amount of the depletion charge was considered sufficiently excessive to cover also the delay rentals.

Sometimes, as a result of uncertainties of gas production, the gas supply may be gone before investments in field developments have been fully retrieved. State commissions do not uniformly treat such property which is no longer "used and useful." Because "large dividends" had been paid stockholders and because no depreciation reserve had been accumulated in earlier years, the Indiana Commission did not allow a petition for a large depreciation and depletion allowance when the gas supply of a company was nearly exhausted.[66] In Oklahoma no consideration was given in rate proceedings to that part of a pipe line which was connected to a depleted field.[67] West Virginia, on the contrary, has permitted depreciation of a transmission line at a yearly rate of 10% ". . . by reason of redundancy or excess capacity."[68]

[61] *Ibid.*, p. 486.

[62] *Re Hope Natural Gas Co.* (West Va.), P.U.R. 1921 E 418; *Re Peoples Gas Co.* (Ind.), P.U.R. 1923 C 763; *Re United Fuel Gas Co.* (West Va.), P.U.R. 1924 A 357; *McAlester Gas & Coke Co.* (Okla.), P.U.R. 1924 B 772; *Natural Gas Co. of West Va. v. Pub. Serv. Com.*, P.U.R. 1924 D 346, 121 S.E. 716; *Re American Indian Oil & Gas Co.* (Okla.), P.U.R. 1928 C 815; *Columbus Gas & Fuel Co. v. Pub. Util. Com. of Ohio*, 4 P.U.R. (N.S.) 152, 292 U.S. 398 (1934).

[63] *Supra*, n. 19.

[64] *Natural Gas Co. of West Va. v. Pub. Serv. Com.* (West Va. Sup. Ct. of Appeals), P.U.R. 1924 D 346, 121 S.E. 716.

[65] *Dayton P. & L. Co. v. Pub. Util. Com. of Ohio*, 3 P.U.R. (N.S.) 279, 292 U.S. 290 (1934).

[66] *Re Peoples Gas Co. of Milroy*, P.U.R. 1923 C 763. See also *Re Interstate Public Service Co.*, P.U.R. 1922 B 711.

[67] *Re Oklahoma Gas & Fuel Co.*, P.U.R. 1924 B 831.

[68] *Re Cumberland & Allegheny Gas Co.*, P.U.R. 1928 B 20.

Natural gas companies have occasionally sought high depreciation allowances on the ground that a natural gas system is in eventual, but not imminent, danger of abandonment because of the omnipresent depletion characteristic of the business. Doubtless there is some justification for this view, but recognition of depletion of the gas reserve at some uncertain future date would add another conjectural factor to the rate-making process. The Columbus Gas & Fuel Company (Columbia Gas & Electric System) objected to the inadequacy of the Ohio Commission's depreciation allowance, because it thought the future possibility of abandonment of natural gas service had not been amply forecasted. In reply to this objection the United States Supreme Court said:[69]

"There is nothing to show, however, that any such abandonment is planned or even reasonably probable. On the contrary, the course of business makes it clear that when the fields in use shall be exhausted, the business will extend to others, and this for an indefinite future, or certainly a future not susceptible of accurate estimation."

Natural Gasoline Revenue

Natural gas is customarily treated for extraction of its natural gasoline content before being transported. After higher hydro-carbons (propane, butane, etc.) are removed, a better gas, particularly in methane content, remains for utilization in burners. A fraction of a gallon to five or more gallons of natural gasoline may be obtained per MCF of gas. In 1934 the average amount of gasoline extracted per MCF of gas was 1.2 gallons.[70] Natural gas from "wet" gas or oil wells has a higher gasoline content than natural gas obtained from "dry" gas wells. Although only a fraction of total natural gasoline sales are made by utility companies, the absolute amount of gasoline sales by natural gas utilities is sufficiently large to make treatment of revenue from this by-product a significant regulatory problem.[71]

Being a joint product with natural gas, natural gasoline ought to be treated, for example, like by-products of the manufactured gas industry where revenue from residuals less their processing cost is added to income from gas sales. Because natural gas utilities in the Appalachian area have been ordered to include from ½ to all net profits from natural gasoline with revenue from their public utility business, natural gas consumers share in profits obtained from extracting and selling natural gasoline. In southwestern states, however, natural gas rate cases for an unexplainable reason have not treated the problem of natural gasoline revenue.

In 1918 the West Virginia Commission considered a natural gasoline extraction plant and revenue therefrom part of the public utility system. When United Fuel Gas Company (Columbia Gas & Electric subsidiary) had shown in one year a net profit of $299,293 on a natural gasoline plant investment of $279,972, the West Virginia Commission ordered a credit to general expenses of ½ the net earnings from natural gasoline business.[72] The Ohio Commission ordered inclusion of all net profits from natural gasoline with the gas company's revenue from public utility sales.[73] In a case originating in Kentucky the

[69] *Columbus Gas & Fuel Co. v. Pub. Util. Com. of Ohio, op. cit.*

[70] U. S. Bureau of Mines, *Minerals Yearbook*, 1935, p. 823.

[71] Since 1910 the amount of natural gasoline sales by all producers has increased until it reached a billion and a half gallons in 1934 (*Ibid.*, Statistical Appendix, p. 44).

[72] *Re United Fuel Gas Co.* (West Va.), P.U.R. 1918 C 194.

[73] *Re Logan Gas Co.*, P.U.R. 1929 A 232.

United States Supreme Court supported a credit of 50% of natural gasoline net income to public utility revenue.[74] The Pennsylvania Commission, however, was believed to be ". . . right in declining to consider profits from the sale of gasoline in reducing the rate for . . . gas" in the absence of evidence of net profits from natural gasoline, although it was admitted that the ". . . company is entitled to a fair price for the use of gas to produce the gasoline."[75]

If a company produces its natural gas supply, there is no apparent justification—under effective state regulation—for failure to treat the natural gasoline business for rate-making purposes as a part of a public service system.[76] By this procedure the investment in, as well as the expenses and revenues of, natural gasoline business would become a part of the public utility's business. Profits from natural gasoline business, therefore, would reduce rates for natural gas service. In fact, if public utility operations of a natural gas company may properly include ½ the net income from gasoline sales, it would seem that the entire natural gasoline business may justifiably be considered part of a regulated system. Thus all profits from natural gasoline should be included with other revenue when natural gas rates are fixed.

Natural gas systems have often organized separate companies to extract and sell natural gasoline. By this subterfuge these systems hoped to drain all profits of natural gasoline business to stockholders, rather than use the profits to decrease natural gas prices. After the foregoing decision, which ordered United Fuel Gas Company to credit public utility revenue with ½ the profits from natural gasoline, the Virginian Gasoline and Oil Company was organized and to this new company were transferred all natural gasoline equipment and gasoline extraction rights of the system.[77] For these acquisitions the Virginian Company agreed to pay United Fuel Gas Company ⅛ of gross revenue rather than ½ of net revenue from natural gasoline business. Oddly, and apparently without much investigation, the West Virginia Commission approved the ⅛-of-gross-revenue agreement.[78] The City of Charleston, West Virginia carried this United Fuel Gas Company case to the West Virginia Supreme Court of Appeals.[79] There evidence was presented to show that, because of the peculiarities of the natural gasoline extraction business, ½ of net income would be three times as large as ⅛ of gross returns from sales of extracted natural gasoline.[80] This court ordered that 50% of net income from natural gasoline be credited to the gas business since the extraction privilege seemed to be worth this sum. Following the court's opinion, the West Virginia Commission returned to an inclusion of 50% of natural gasoline net revenue with receipts of the gas company.[81]

Similarly in Ohio the Logan Gas Com-

[74] *United Fuel Gas Co. v. R.R. Com. of Kentucky*, P.U.R. 1929 A 433, 278 U.S. 300.

[75] *Erie v. Pub. Serv. Com.*, P.U.R. 1924 D 89.

[76] Again there is a difference between the natural gas company which produces as well as distributes gas and the company which purchases its gas under a long-term contract. In the latter case natural gasoline revenue is obtained by unregulated owners of the wells.

[77] *Supra*, n. 72.

[78] *Re United Fuel Gas Co.*, P.U.R. 1924 A 357. The Commission cited the Southwestern Bell case (43 S. Ct. 544) when it remarked that the Commission's province did not extend to an analysis of business judgment in separation of gasoline and gas business.

[79] *Ibid.*

[80] *Charleston v. Pub. Serv. Com.* (West Va. Sup. Ct. of Appeals), P.U.R. 1924 B 601; 120 S.E. 398.

[81] *Re United Fuel Gas Co.* (West Va.), P.U.R. 1925 B 705. An appeal was refused in *United Fuel Gas Co. v. Pub. Serv. Com. of W.Va.*, P.U.R. 1927 A 707; 14 F (2d) 209.

pany was turning over all its gas to the Preston Oil Company for extraction of the natural gasoline content. Because both companies were controlled by the same stockholders, the oil company was retaining all income and profits from natural gasoline business and was paying nothing for the extraction privilege. Ignoring this corporate subterfuge, the Ohio Commission ordered that all profits from natural gasoline be included in the gas company's revenue.[82]

The United States Supreme Court has likewise ignored the presence of a separate corporation for control of natural gasoline extraction and revenue. This Court asserted that they ". . . need not labor the point that a public service corporation may not make a rate confiscatory by reducing its net earnings through the device of a contract unduly favoring a corporation owned by its own stockholders."[83]

When a natural gas company is prospecting for an additional gas supply, oil may be discovered. Again public utility companies have organized subsidiaries to transact and control the oil business. Although neither commissions nor courts have faced this issue, there is an apparent analogy of production of oil to the foregoing cases on natural gasoline extraction.

Summary

Contrasted with other public utilities, a natural gas utility sells a natural resource directly to its customers. Aside from the task of valuing the usual physical and intangible property items, a procedure common to regulation of all utilities, several disturbing problems in state regulation of natural gas companies arise from this peculiarity of the industry. In several recent cases some courts and commissions have justifiably omitted undeveloped or unoperated gas leases and land from the rate-base, unless the time for commencement of gas production from the land is imminent. For undeveloped leases, therefore, only delay rentals ought to be included in costs of furnishing natural gas service. Sometimes even inclusion of delay rentals on "unnecessary" leases has been denied, although determination of a "reasonable" reserve should be tempered in view of uncertainties of gas production and competitive troubles with independent gas producers. While there have been decisions to the contrary, the United States Supreme Court and state commissions now usually value developed gas leaseholds and lands at cost or approximate cost rather than accept generous "present value" figures presented by natural gas companies. Fortunately these commissions have recognized the circular reasoning of the "present value" principle when applied to valuation of gas lands, and that customers by paying delay rentals make possible the gas discoveries which lead to the high "present value" demands of gas companies.

Well-drilling expense, which is incurred continually in attempts to maintain gas reserve, may be charged to operating expense or may be added to the rate-base, even though a "dry" hole be the result. But well-drilling costs may not be initially charged to operating expenses and later included in the rate-base. Through annual depletion allowances natural gas companies are permitted to amortize value of developed gas land and leases during the period of each gas pool's active production. Depreciation allowances on field developments, e.g., gas wells, gathering lines, and transmission lines, are often and generally should be based on the

[82] *Supra*, n. 73.

[83] *Supra*, n. 74.

rate of depletion of gas fields in which developments are located. Finally, state commissions in the Appalachian area have required that all or a portion of revenue obtained from natural gasoline sales must be included with operating revenue of the utility despite organization of companies to control natural gasoline business.

Most of the cases involving these regulatory problems have arisen in eastern states because (1) the field price of gas has been steadily increasing in this section, and (2) nearly all large natural gas systems in this area hold sizable amounts of developed land and undeveloped gas acreage. State commissions in southwestern and western states will be more cognizant of the importance of these problems when public utility systems in these sections increase their investments in gas land, as gas companies seek a higher gas land valuation following an increase in field prices for gas, and when they recognize the opportunity to reduce gas rates through inclusion of natural gasoline business with the public utility system.

Urban Land Department

MORTON BODFISH, *Editor*

Housing Developments in Canada

Provisions and Objectives of the Housing Act

THE Dominion Housing Act, 1935, has a twofold purpose: (1) to assist in the improvement of housing conditions, and (2) to assist in the absorption of unemployment by stimulation of the construction and building material industries. The Minister of Finance is empowered to make advances and to pay expenses of adminstering the Act to the extent of $10,000,000. The Act provides for loans for the construction only of new dwellings (including single-family houses, duplexes and apartment houses), the security taken being a first mortgage running jointly to an approved lending institution and to the Dominion Government. In most cases the loans will be made for 80% of the cost of construction of the dwelling or its appraised value, whichever is the smaller. Of this loan the lending institution will advance 60% and the Government 20%. The remaining 20% is to be provided by the borrower.[1] The interest rate paid by the borrower is 5%. This is made possible by the fact that the Government's funds are advanced on an interest basis of 3%. Loans are made for a period of 10 years subject to renewal for another 10 years upon revaluation of the security and on conditions satisfactory to all parties concerned. Interest, principal and taxes are payable in monthly instalments. Amortization of principal is effected at a rate sufficient to pay off the loan in 20 years, but more rapid amortizations may be arranged to suit the convenience of the borrower. The Act requires sound standards of construction and contains other clauses safeguarding the mortgage.

Accomplishments under the Act

The history of the Dominion Housing Act since its inception in 1935 has been one of a gradual growth. Loans made under the Act have been sound loans, made to credit-worthy people. Had the terms of the Act been such as to encourage unsound loans the Act might have had a very rapid growth but it would have been at the expense of sound lending practice.

The Act has now been in operation long enough to permit comparison between operations during the last three months of 1935 and the corresponding period for 1936. The latter period showed an increase of 150% over 1935 and, despite the usual seasonal drop in new residential construction, loans for September totalled almost as much as loans made in April, and December showed a steady gain over September.

An analysis of approved loans to the end of February, 1937 shows that 808 loans were made in the amount of $5,692,842, an average of $7,045 per loan. However, inasmuch as many of these loans were for two-family houses and apartment houses, a total of 1,200 family units were provided for. This shows an average loan per family unit of $4,744. The total volume of residential construction in Canada for 1936 amounted to $42,858,000. Of this volume the Dominion Housing Act was directly responsible for nearly 15%.

In September, 1936 new regulations came into effect to encourage lending institutions to make loans to the prospective house owner of moderate means. The new arrangements concern allocation of losses on loans as between the Government and the lending agencies. According to present provisions, in the case of an 80% loan on a single-family house, the Government will bear 80% of the loss, if the loan amounts to $3,000 or less; 75% on loans between $3,000 and $3,500; and 70% on loans between $3,500 and $4,000.[2] Variations of this

[1] Provision is also made in certain cases for loans of 70 to 75%, where desired by the borrower or deemed advisable by the lending institution.

[2] Original allocation of losses provided that if, at the time the loss occurs, the amount owing under the mortgage is more than the amount advanced by the lending institution, ⅗ of the loss will be borne by the Government, and ⅖ by the lending institution. If, at the time the loss occurs, the amount owing under the mortgage is less than the amount advanced by the lending institution, ⅗ of the loss will be borne by the lending institution and ⅖ by the Government. This original formula continues in effect for loans above $4,000.

formula have been developed for duplexes and apartment houses.

Since these new regulations many loans have been made in the amount of $3,000 and less. Now it can be said without fear of contradiction that the Dominion Housing Act is accomplishing one of the primary purposes for which it was intended, that of assisting the small house owner, particularly the man of moderate means, to own his own home.

If we assume the dividing line between a small or medium low-cost house and the average house to be $5,000, mortgages of $4,000 and below will indicate to what extent the Act is being used to finance the small house. One hundred and ninety-seven loans have been made for amounts of $4,000 or less and, of the remaining loans, we find that 311 family units of less than $4,000 each were provided for. Thus, out of 1,121 total family units, 508 were for low-cost houses and low-cost apartment units.

The Dominion Housing Act has accomplished many things which cannot be shown in figures. It has made the Canadian people "house conscious." It has shown people, particularly those of low income, that it is possible for them to have a well-built, convenient, modern home, structurally sound and of pleasing appearance at a minimum of cost. The Dominion Housing Act Minimum Standards of Construction and Memorandum Specifications have played an important part in educating prospective house owners to the value of sound construction and to the dangers of shoddy construction. These Standards and Specifications, which are being adopted not only for houses built under the Act but for many other houses, have given the prospective home owner confidence that if his house is built accordingly he will have a house free from excessive maintenance and depreciation for years to come.

People who have had unfortunate experiences in the past in house building, experiences which have caused them to regret their venture into home owning, are now willing to undertake home ownership again because of their confidence in the results to be achieved with clear and definite specifications.

Cost Comparisons

The possibilities contained in the Dominion Housing Act for solving the low-cost housing problem have not, as yet, to any great extent been touched. It is true we have a number of loans on houses which might rightly be said to come within the low-cost brackets, houses upon which an 80% loan equals an amount between $2,000 and $2,500, and which the owners are occupying at a cost, covering interest, amortization, taxes and insurance, of between $17.00 and $20.00 per month. This may not be low-cost housing according to exponents of subsidies but it is low-cost housing on an economic basis and a type worthy of encouragement.

Quite recently low-cost housing plans were approved by the Housing Administration for a house which can be built in most parts of Canada at a cost of $2,400. This house contains a living room, kitchen, bathroom, three bedrooms, full basement, central heating system, insulated and exceptionally well constructed.

Under the Dominion Housing Act this house could be built on an average lot for, say, $2,700. An 80% mortgage would amount to $2,160 leaving an equity to be supplied by the owner of $540.00, and the monthly cost to pay interest and repay the loan in 20 years would amount to $14.12. Surely, this can be said to be getting near to the ultimate in low-cost housing in Canada where building costs are comparatively high for many reasons, of which our climate is not the least.

It is true that the problem of saving the required equity of $540.00 may be insurmountable to many in the low-income group. It may entail great sacrifice by the family, but the family which is not willing to make sacrifices for a home of its own might, perhaps, be better off not to own its own home. Having a home of your own usually is, and always should be, the reward of saving and sacrifice and not a gift from a benevolent government.

Interesting comparisons may be made between the Dominion Housing Act and housing acts of other countries.

Under the Dominion Housing Act a house costing $5,000 against which there is an 80% or $4,000 mortgage requires the owner to have an equity of 20% or $1,000. The monthly payment which includes interest and amortizes the mortgage is $26.15 for 20 years, totalling $6,276.

Under the United States National Housing Act the same house would require the same amount of equity, but the monthly payment would amount to $30.11 for 19 years and 6 months, totalling $7,045.

A house of similar accommodation and size, with similar finish and equipment, if built in England according to the requirements made necessary by our Canadian climate, would cost about the same to build as in Canada but might be purchased for a smaller down payment. If the required equity or down payment is 10%, the monthly payment under the usual building society financing plan would amount to $27.79 for 21 years, totalling $7,005. However, if the equity is 20%, which is comparable to that required under the Dominion Housing Act, the monthly payment would be $24.70 for 21 years, totalling $6,224. This difference indicates that a $4,000 Dominion Housing Act mortgage costs approximately 20c more per month, including interest and principal, than it would cost in England.

The Government Home Improvement Plan

To supplement the operations carried on under the Dominion Housing Act, the Government announced in September, 1936, the inauguration of a Home Improvement Plan. This plan provides for chartered banks and certain approved lending institutions to make loans to owners of residential property (including farm buildings) for repairs, alterations and additions (including built-in equipment) to urban and rural dwellings. The loans shall not exceed $2,000 on any single-family house. However, in the case of houses containing more than one family unit, the amount of the loan shall not exceed $1,000, plus $1,000 for every family unit provided. Loans are repayable in equal monthly instalments or in suitable instalments to fit the conditions of the individual borrower.

Loans in the amount of $1,000 or less must be repaid within three years. Loans in excess of $1,000 must be repaid within five years. The maximum charge for loans shall be 3¼% discount for a one-year loan repayable in equal monthly instalments and proportionate rates for other periods. Loans made in accordance with approved conditions will be guaranteed by the Government to the extent of 15% of the aggregate amount of loans made by each approved lending institution. The limit of the aggregate loans is $50,000,000 and the limit of the Government's guarantee is $7,500,000. Up to March 31, 1937 a total of 6,293 loans, amounting to $2,405,350.30, had been made under this plan. The average loan is $382.23.

Attitude of Lending Institutions

The manager of one of the approved lending institutions recently made the statement that "while his company had only made two Dominion Housing Act loans in a month, he was able to trace 26 other house loans to the influence of the Dominion Housing Act." If his experience is typical, it is possible that the Dominion Housing Act was in a large way responsible for a substantial proportion of the volume of house building in Canada during 1936.

Increased and enthusiastic cooperation by approved lending institutions has been noticeable during the past few months. Four new companies have entered into the agreement to become approved lending agencies, one in the West and three in Quebec, and negotiations are now pending with several other lending institutions.

The present approved lending agencies have recently announced their intention of extending their lending facilities to more remote areas. Companies which formerly confined their activities to the head office district are now willing to expand. It is anticipated that in the spring loans will be made in the Northern Ontario and Quebec mining districts. Other companies have signified their intention of considering loans through the Middle West. Recently another eastern lending institution entered the field in British Columbia, and loan applications are now being considered in the Port Arthur and Fort William districts. This indicates better cooperation and confidence in the future of the Act and in the fundamental purposes behind the Act, that of sound lending within the limits of safety.

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A Comment on the *Report of the President's Committee on Farm Tenancy**

THIS progressive and, in many particulars, notable report deals essentially with the problem of the insecurity of farm families, a much larger, harder, and more important issue than the dislocations existing in farm tenancy. The title of the *Report* is altogether too narrow, and thus quite misleading. The Committee's recommendations, presumably, include (see p. 10) measures to (a) facilitate farm ownership, (b) help present owners to keep their farms, (c) rehabilitate those not now prepared to take over the farms they operate, (d) improve the conditions of farm laborers, (e) aid families stranded on submarginal land, (f) take submarginal land out of cultivation, and (g) discourage speculation in farm land. No one at all acquainted with agriculture can escape the real magnitude of such an assignment; farm tenancy, however, is not even a suitable tail for flying such a kite.

The *Report* is divided into two parts: (1) a brief summary of findings which are to be supplemented by a technical report which has not yet been published; (2) recommendations for action. The American system of land tenure is examined in the findings, but since the *Report* merely summarizes these findings, it would seem well not to comment upon them inasmuch as a more formal report, including the detailed data and materials on which it is based, will soon be made available.

Returning, therefore, to the primary aim of the *Report*, which is to show how to increase the security of farm people, it is worth while to reemphasize the size of the undertaking. It will appear big even after years of sympathetic study and rigorous thought have been given to it. It would be unreasonable to expect a comprehensive or a complete analysis of this tremendously complex problem to emerge from the hands of even the most competent committee from a few months of hurried work. The *Report*, presumably, was not intended to be such an analysis; it certainly is not. There are many gaps, vague recommendations, and parts in it which do not readily fit into a broad, consistent policy. This fact does not minimize its contribution. It should be considered a first approximation of the probable solution; its recommendations a step toward farm security. It points the way. It gives direction and balance.

One may well ponder the query, "What is farm security?" It looms as an important question in the sphere of social engineering; it may well become a *significant idea* in agricultural reform, a focal point around which farm pressure and demands, especially of the less commercial and underprivileged, may center. It is not, however, a carefully defined and useful concept as yet for purposes of economic analysis. One may conceive of it as being synonomous with the general welfare of farm people which is to make it so broad as to be meaningless. To define it as a "secure relationship to the land" is making it too narrow, if not illogical, since farm families stranded on submarginal land certainly are altogether too "securely" related to such land. While the *Report* does not attempt to define farm security, it does consider that problem from a number of angles and at a series of different levels, thus fairly adequately opening the field, a much needed and timely contribution.

A constructive and restrained tone of the value of experimentation runs throughout the recommendations. There is, however, much emphasis upon action, both federal and state; probably too much. This may be necessary to counteract the apparent indifference and inertia that has so long prevailed with reference to farm security, especially in the lower levels. But this procedure has made for many types of recommendations, some of which are not clear as to the principles upon which they are based, nor is it always evident how each is likely to interrelate with the others.

* House Doc. No. 149, 75th Cong., 1st sess., February 16, 1937.

One specific comment must suffice. In the distinctly commercial farming areas dependent to a large extent upon non-farm capital, farm security requires, above all, a much more stable level of prices in order to lessen the risk that is involved in (a) the creditor-debtor contract and (b) the land-rent contract. On this phase the *Report* is weak and mixed. The importance of stable prices and income is referred to several times, but its significance is overshadowed by lesser considerations, and in the section dealing with land speculation (p. 19) it is quite obliterated. Land speculation is labeled as one of the most potent forces retarding the ownership of land by farmers. Here sight appears to have been lost of the fact that economic optimism—and for that matter, pessimism—is not something that is peculiarly inherent in the make-up of farmers. Back of the costly dislocations that have occurred in commercial agriculture, as a result of overexpansion and speculation of farmers, lies the whole story of the instability of the general price level and our business booms and depressions. One gains the impression that speculation must be curbed, yet there is no indication that there is an appreciation of the causes that lie back of this undesirable and costly form of speculation such as came in the period of 1918-1920, or that associated with the long-run, gradual increase in the general price level starting at the turn of the century and continuing until the World War, or the shorter-run swings more strictly in farm income arising out of the fluctuations in business activities.

In this connection, the importance of a declared and clearly defined monetary policy, including its relationship to agricultural and non-agricultural credit, can hardly be overemphasized.

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The Frazier-Lemke Decision

IN *Louisville Joint Stock Land Bank* v. *Radford*[1] the Supreme Court held the first Frazier-Lemke Act[2] unconstitutional. After holding that the Act was a law "on the subject of bankruptcies," the Court held that, since the bankruptcy power is subject to the Fifth Amendment, the Act was unconstitutional because it authorized a taking of property without due process of law. The Act was held to be vulnerable on due process grounds because it took from the mortgagee five fundamental rights given him by the laws of Kentucky under which the mortgage was executed: (1) the right to retain the lien until the secured indebtedness was paid; (2) the right to realize upon the security by a judicial public sale; (3) the right to determine when such sale shall be held; (4) the right to protect its interest by bidding at such sale whenever held, and thus to assure that the mortgaged property will be devoted primarily to the satisfaction of the debt, either through receipt of the proceeds or by taking the property itself; and (5) the right to control meanwhile the property during the period of default, subject only to the discretion of the court, and to have the rents and profits collected by the receiver for the satisfaction of the debt.

In a second attempt to relieve debtor-farmers, Congress passed the second Frazier-Lemke Act[3] in 1935. The new Act was carefully drafted to meet the objections of the Radford decision. The new Act, like the old, requires that the farmer first proceed unsuccessfully under section 75 (a-r) before he may invoke subsection (s), the so-called Frazier-Lemke Act. Hence the farmer must have failed to procure assent of the majority in number and amount of the claims against him to a composition or extension proposal, or he must "feel aggrieved" by a proposal which has been properly accepted. After complying with this condition precedent he may file under subsection (s) and ask that his property be appraised after setting aside his exemptions, encumbered and unencumbered, and that he be allowed to retain possession of his property under control of the court. The appraisers are required to determine the fair and reasonable market value of the property. All encumbrances remain in full force and effect. All proceedings against the farmer and his property are stayed for three years

[1] 295 U. S. 555 (1935).
[2] 48 Stat. 1289, 11 U. S. C. A. §203 (s).
[3] 11 U. S. C. A. §203 (s).

providing he pays a reasonable rental semi-annually for the property of which he retains possession. The rental must be used to pay taxes and upkeep and the balance may be distributed to creditors as their interests appear. Discretionary power is vested in the court to order the sale of unexempt perishable property not necessary for farming purposes, and to require payments on principal whenever necessary to protect the interests of creditors, providing always the primary purpose of farmer rehabilitation is not defeated. At the end of the three-year period or earlier the farmer may pay the appraised value of the property, less amounts already paid into court on the principal. However, any creditor or the farmer may demand a re-appraisal. After payment of the appraised value the court is authorized to turn over to the farmer title as well as possession of his property. The machinery provided for appraisal and payment by the farmer is supplemented, however, by a provision authorizing any secured creditor to insist upon a sale of the property at public auction. The creditor's request for such public sale is mandatory upon the court and secured creditors are permitted to bid at the sale. If a sale is insisted upon, the farmer has 90 days after the auction to redeem his property by paying the sale-price plus 5% interest. If the farmer fails to comply with any of the provisions of the section, or with any of the orders of the court, or is unable to refinance himself within the three-year period, a trustee may be appointed and the property liquidated as in ordinary bankruptcy proceedings.

In *Wright* v. *Vinton Branch of Mountain Trust Bank*[4] the Supreme Court unanimously held the new Act constitutional. In referring to the five rights of which the mortgagee had been deprived by the first Act according to the decision in the Radford case,[5] Mr. Justice Brandeis, writing for the Court, declared that it was not held that the deprivation of any one of the five rights would have rendered the Act invalid but that the "effect of the statute in its entirety was to deprive the mortgagee of his property without due process of law." However, the Justice went on to demonstrate that the new Act adequately preserved the same five fundamental rights. It was not denied that the new Act expressly preserved three of those rights—namely, the right to retain the lien until the secured indebtedness was paid, the right to realize upon the security by judicial sale, and the right of the mortgagee to protect his interest by bidding at the sale. With respect to the right to bid at the sale, the Court noted that the new Act does not in terms permit such bid, but that the legislative history makes it clear that Congress intended that the mortgagee should have the right to bid.

More doubtful, however, was the question whether the Act denied the mortgagee the "right to determine when the sale shall be held." It had been contended that the new Act gives the mortgagor an absolute right to a three-year stay. The opinion met this contention (1) by stating that the Court would not decide whether, in view of the economic emergency, an absolute stay of three years would have been justified under the bankruptcy power, and (2) by holding that the Act is susceptible of the interpretation that the stay is not absolute. In so holding the opinion pointed to provisions permitting the court to order bankruptcy liquidation upon failure of the farmer to comply with any provision of the section or with court orders, permitting similar liquidation upon a showing during the three-year period that the debtor is unable to refinance himself, making his tenure subject to the requirement that he pay a reasonable rental, authorizing the court to require payments on the principal over and beyond the reasonable rental, and permitting the court to shorten the stay of proceedings if in its judgment the "emergency ceases to exist in its locality."

In meeting the contention that the new Act deprives the mortgagee of his right to control the property during the period of default, the Court held that the possession of the mortgagor under the Act is tantamount only to the possession of a receiver or trustee constantly under the supervision of the court. To the argument that the Act is unreasonable in permitting the mortgagor to defer payment of the first installment of rent until the end of one year, the Court replied that the provision that "the first payment of such rental shall be made within one year" is properly interpreted to mean that the court may not postpone the payment beyond one year; hence the judge may

[4] 57 S. Ct. 557 (1937).

[5] *Supra*, n. 1.

require an earlier payment of the first rental if the debtor has funds available.

A distinct argument, not based upon the five rights recognized by the Radford decision, was that the new Act is unreasonable in that the stay may exceed the term of three years, since many months may be consumed in efforts to obtain a composition, and in effecting an appraisal of the property. This possible delay was said to be particularly unreasonable in the case before the Court, since the mortgage in question was in the form of a deed of trust governed by the laws of Virginia, which grant a creditor, under such a deed, a peremptory right to enforce payment by sale. It was argued that to permit an extended stay of the rights of a mortgagee under such a deed is not merely to modify his remedy but to deprive him of substantive rights. In meeting this argument the Court notes that unlike the police power of the state which is subject to the restrictions of the contract clause, the bankruptcy power of the Federal Government may be exercised so as to take away substantive as well as remedial rights so long as there is no violation of the due process clause of the Fifth Amendment. The Court then held that the delay which may result under the present Act does not constitute an unreasonable exercise of the bankruptcy power.

A simple illustration will suffice to demonstrate that the features of the new Act which made it constitutional also rendered it much less satisfactory than the original Act as a measure of farmer relief. Assume that the farmer owns 100 acres of land appraised at the inception of the proceedings at $10,000. There are two mortgages on the farm, a first mortgage of $10,000 plus back interest of $500, a second mortgage of $3,000 with back interest of $300 and back taxes amounting to $500. Assuming no re-appraisal, the first Act permitted the farmer to purchase the farm for $10,000 at the end of six years. The first mortgagee would lose part of his principal, all his interest, and the second mortgagee would not receive a penny. On the other hand, the new Act grants little more than a three-year moratorium during which a reasonable rental must be paid. At the end of the moratorium, if a re-appraisal does not indicate a higher value, either the first or the second mortgagee can demand a sale, and either mortgagee can bid more than the appraisal value. Although the farmer has 90 days in which to redeem after sale, he is required to pay the purchase price and not merely the appraised valuation. It thus becomes clear why the Supreme Court held that the new Act is not an unreasonable measure of debtor relief.

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Progress of Rural Electrification

ONE of the stock arguments of proponents of governmental aid in rural electrification has been that the United States shows a much smaller per cent of farms receiving central station service than many foreign countries. Since the birth of the Rural Electrification Administration in 1935 it has made wide use of a pictorial chart purporting to show the degree of farm electrification in five countries with the United States at the bottom of the list, having only one farm in 10 electrified, while Ontario is credited with 15%, Sweden with 50%, Germany with 90%, and Holland is placed at the top with complete coverage. Opponents in Congress and among electrical utilities have alleged that the chart is based on untrustworthy and non-comparable figures. It is pointed out that the figures have been gathered at varying dates and are usually taken from unofficial estimates. The definition of a "farm" varies from one country to another, as do such factors as population density, size of farms, number of farms per mile of road, concentration of farms in given areas. It has also been maintained that governmental subsidies have entered largely into foreign electrification, as in Japan where over 90% of the homes (but not 90% of the farms) have been electrified, with government aid amounting to ⅔ of the cost. In order to judge the true effectiveness of electrification programs, we must consider the average utilization of energy and the number of appliances sold; on both these scores the United States claims leadership over all comparable areas in the world.

Need for Rural Electrification in the United States

Sound pleas for extension of electrical lines can be derived from the advantages which accrue from a wider use of electrical energy. They may be summarized as follows: electricity on the farm will make life more pleasant by relieving drudgery; will speed up production in numerous ways, thus increasing profits and consequently buying power and national prosperity; will bring cultural benefits, as by radio; will aid in soil conservation by providing power for pumping water from storage basins where it may be held to prevent erosion; will keep young people on the farms by helping to equalize pleasures and opportunities; will maintain employment through line construction and maintenance work; will aid manufacturers of materials and equipment.

Utility operators agree that rural lines have not been extended rapidly in the United States, but they differ with REA on the causes. According to the operators, progress has been slow because: (1) well constructed lines are expensive to build and entail heavy investments; (2) if the company has the money to invest, it still cannot build faster than demand will warrant; i.e., a fair return on the investment is necessary for protection of investors; (3) the average farmer cannot afford enough wiring and equipment to boost power sales to a point where the utility can make a profit; (4) many farmers cannot or will not make use of lines serving their territory.

According to advocates of federal aid, the following are the real reasons holding up rural extensions: (1) excessive rates, in part the result of (a) vast sums spent for propaganda, (b) other large sums used to fight rate-reduction orders, (c) high dividend rates, often on watered holding company stock, (d) excessive salaries paid to high officials, (e) undue promotional and service charges paid by the operating unit to the holding company, (f) dishonest or unethical accounting and valuation practices; (2) use of political power by utilities among legislatures, officials, and courts to stop cooperatives and to block public ownership, through discriminatory laws, refusal to sell power at wholesale, injunctions, dummy lines, monopoly claims, and other devices; (3) the utility practice of skimming the cream and leaving many sparsely settled areas stranded; (4) unnecessarily expensive rural line construction which has kept rates high, with the result that the farmer paid double, since he was also forced to pay large amounts to cover a part or all of the construction costs.

The desirability of wider use of electricity in rural areas is recognized throughout the world. Papers and addresses by leading authorities at the Third World Power Conference, held at Washington in September, 1936, declared rural electrification essential to elevate standards of rural living and restore farm life to favor. France is one of the nations which has made great strides in the past decade. In the United States the more progressive utilities have been alive to the potential markets for power and appliances, and are using promotional rates, appliance loans, and educational campaigns to expand their markets. Many leaders have regarded private enterprise as too slow in its action, and too prone to "cream skimming." Grange leaders, Senator Norris, Representative Rankin, Morris Cooke, and many other Americans worked toward federal assistance, and finally the Government under Roosevelt came to their aid.

In 1936 came the most rapid increase in rural electrification in our history. Over 25,000 miles of rural lines were built and over 110,000 farms received electric service for the first time, a result achieved by the combined efforts of REA and private capital, which was stimulated in some areas by the threat of REA loans to cooperatives if the local utility did not take prompt action. Unfortunately, some of these private company extensions have "skimmed the cream" again, leaving unelectrified pockets which cannot receive service for years to come, because they are too small or sparsely settled for cooperatives to develop.

Progress of the REA

In spite of some "ill-advised opposition from selfish interests,"[1] REA has gone forward with missionary zeal in stimulating rural electrification. It claims that loans have been made only under conditions that give complete protection to the Government. The only subsidization is in the form of low interest rates, and the payment of all administrative expenses from general taxation. Former Administrator Cooke testified before the House Committee that on a 10-year basis the REA should be able to electrify from 500,000 to 1,000,000 farms. During the first 21 months of REA, allotments were made covering 158,600 customers (Table I). REA figures show California as having the largest per cent (53.9%) of electrified farms (in 1935), slightly leading New Hampshire's 53.7%. At the bottom of the column came Louisiana (1.7%), Arkansas (1.2%), and Mississippi (0.9%). North Central, Southwestern, and South Atlantic states were also low in the list, having less than 10% of farms electrified, Florida leading with 7.8%. As of April 1, 1937, allotment of REA funds had been made in 41 states, the Lake states vying with the South Atlantic states for the lead. Ohio, Indiana, Illinois, Wisconsin, Minnesota, and near-by Iowa are thickly dotted with projects in various stages of development, as are also Virginia, North Carolina, South Carolina, Georgia, and Florida. No grants have been made in New Hampshire, Vermont, Connecticut, Rhode Island, New York, Utah, and Nevada, though the reasons vary greatly. Rural line extensions in New York are being made with more rapidity than in any other section of the country, and wholly with private funds. The private utilities are determined to keep out government loans, and at the present rate of construction will

TABLE I. STATUS OF REA PROJECTS, AS OF FEBRUARY 15, 1937*

	Emergency Relief Appropriation Act of April 8, 1935	Rural Electrification Act of May 20, 1936	Total
I. 245 Allotments approved	$15,040,529	$33,059,750	$48,100,279
Miles of line	13,706	31,582	45,288
Customers	52,133	106,467	158,600
II. 144 Loan contracts executed	$13,876,629	$16,211,750	$30,088,379
Miles of line	12,650	14,839	27,489
Customers	49,018	51,630	100,648
III. 106 Projects with construction specifications approved, under construction or completed	$13,702,129	$ 8,470,650	$22,172,779
Miles of line	12,494	7,917	20,411
Customers	48,236	27,953	76,189
IV. 32 Projects energized in whole or in part	$ 6,385,079	$ 458,400	$ 6,843,479
Miles of line	5,820	468	6,288
Customers	24,157	1,999	26,156
V. 2 Loan contracts executed for the financing of wiring	$ 30,000	$ 25,000	$ 55,000

*Table supplied by REA staff, April 7, 1937.

[1] REA, *First Annual Report*, January 20, 1937, p. 6

have New York almost wholly electrified in a few more years. In 1934 there was very little activity in rural electrification throughout the United States. REA, increasing prosperity, and other factors have served to bring rural line building to an amazingly rapid growth.

Construction financed with REA funds may move with greater speed in the next nine years than heretofore, because the first few months were given to planning, organizing, and educating the public. On the other hand, the process may slow down because of exhaustion of the best territory, growing competition of private utilities desirous of keeping out government-financed cooperatives, or hostile action of commissions, courts, and legislatures.

Federal aid to rural electrification bids fair to become permanent. If a Department of Conservation should eventuate from the Roosevelt reorganization proposals now before Congress, REA may be taken over as a bureau.

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Public Utility Financing in the First Quarter of 1937

THE flotation of long-term issues at low yields encountered definite resistance in the first quarter of 1937. Hesitancy in the high-grade municipal bond market appeared late in January, followed by mild declines in federal and corporate issues in February and by losses up to five and six points in March.

Despite the reaction in the bond market, the volume of utility securities floated in both January and February of 1937 ran ahead of the same months of 1936, but the March total fell sufficiently far behind to make the first quarter total over 9% under the same period of last year. Had it not been for the large $130,000,000 issue by Philadelphia Electric Company, the March, 1937 volume would have been only 12% of that in March, 1936.

The "stickiness" in the bond market, which became quite marked in March, has been attributed to a number of factors, such as increased federal reserve requirements, business expansion, federal budgetary troubles, uncertainty arising out of labor difficulties, and a buyers' strike. Institutional investors have for some time constituted the major market for new offerings, but according to financial comment these buyers staged a "sit-down" strike of their own early in 1937 with the result that new securities moved quite slowly. Several prospective offerings, such as the Detroit City Gas Company bonds, were postponed because of the unfavorable market. The coupon rate on the Philadelphia Electric issue was raised from 3¼% to 3½%. In view of market conditions, financial interest was centered on this large issue when it came out on March 11. Just how well it actually went over can be told only by the underwriting and distributing group, but reports from some dealers were that distribution was difficult.

Whether or not the reaction in the bond market will continue remains to be seen, but it is interesting to note that buyer interest has revived in the municipal market according to some Chicago dealers. Pressure of accumulating funds may operate to break the buyers' strike.

The volume of utility securities floated in the first quarter of 1937 was $384,922,694, a decline of 9.4% from the same period of 1936 and 50.0% from the preceding quarter. Refunding accounted for 92.8% of the quarter's total, although a few small issues were used entirely to finance new construction.

Twenty-four issues[1] comprised the quar-

[1] Both the number of issues and the volume of flotations referred to in the text and tables are based upon compilations published by the *Commercial and Financial Chronicle*. One of the 24 issues included for the first quarter of 1937 was $200,000 Minneapolis Gas Light Company 4s of 1950 which were sold privately to an insurance company during July and August, 1936. Also, the *Chronicle* did not include in its compilations for the first three months of 1937 the following issues which were reported by other sources: $200,000 Sherrard Power System 5s of 1951; $300,000 Peoples Bridge Corporation 5s of 1946; 22,000 shares of Greenwich Gas Company $1.25 preferred; and 30,000 shares of National City Lines, Inc., common stock offered at $12.50 per share simultaneously with the offering of the units referred to in the text. The *Chronicle* reported $185,000 Bremerton Bridge Company 6s of 1957 as "Miscellaneous" and $1,000,000 of Kansas Pipe Line and Gas Company 5s of 1952 as "Oil," rather than including these issues as public utility financing.

ter's total. Of these 19 were long-term debts, one was short-term, and four were stocks. The 24 issues ranged in size from $125,000 to $130,000,000, with an average of $16,038,000. The median, however, was only $2,619,000, thus revealing the effect of a few large issues on the average.

Long-Term Debt Financing. Nineteen issues in this category contributed $293,142,000 to the quarter's total. Seven of these issues were placed privately but they totaled only $19,178,000 as against a total of $56,180,000 for five issues placed privately in the first quarter of last year. A summary of these private sales is presented in Table I.

The 12 long-term debt issues which were offered to the public totaled $273,964,000, or 71% of the total volume for the first quarter. A summary of these issues is recorded in Table II. Reference to that table reveals that underwriters' commissions were uniformly 2%, except for a few small issues. Incidental expenses were in the neighborhood of ½ of 1% on the large issues, but were several times greater on most of the small flotations.

The data given in Table II for underwriters' commissions and incidental expenses illustrate clearly the burden which these items frequently comprise for small offerings. In two cases commissions were 5% of the principal amount of bonds offered, and for one of the same issues incidental expenses were 4.16%, thus making a spread of over 9% between the price paid by the investor and the net proceeds available to the issuing company. On the other hand, the large issues show approximately only 2½% for this spread. Credit rating and other factors also influence these costs of financing in many instances, but the fact remains that commissions and expenses constitute a serious problem for small and less well established utilities.

The weighted averages shown in Table II for the coupon rate, offering yield, and cost compare favorably with the same items in the first quarter of 1936 but they are slightly higher than for the last quarter of 1936.[2]

Short-Term Debt Financing. The one short-term issue was a $5,100,000 Joint First Mortgage 4% series by North Shore Gas Company and North Shore Coke and Chemical Company maturing January 1, 1942. The bonds were offered at par to yield 4%. After allowing for 3 points commission and 1.46 points incidental expenses, net proceeds were $95.54 per $100. In view of the short maturity, the cost on this issue amounted to 5.02%.

Stock Financing. The four stock issues totaled $86,680,694, the largest amount of stock financing for any quarter since the second three months of 1931. Three of the four stocks were preferred series; the remaining issue consisted of units of preferred and common stock of National City Lines, Inc. The three preferred series were:

[2] For a summary of the averages for each quarter of 1936 see 13 *Journal of Land & Public Utility Economics* 71 (February, 1937).

TABLE I. SUMMARY OF LONG-TERM DEBT ISSUES PLACED PRIVATELY, FIRST QUARTER, 1937

Company and Issue	Principal Amount	Coupon Rate	Maturity Date	Month of Sale	Price
		%			%
Pennsylvania Pr. Co. First Mtge.	$ 6,978,000	3½	1961	Jan.	100.00
Hartford Elec. Lt. Co. Debentures	3,500,000	3	1967	March	100.75
Rochester Gas & Elec. Corp. General Mtge., Series G	3,000,000	3¾	1966	Feb.	104.00
Long Island Lighting Co. First Ref. Mtge., Series C	2,000,000	4	1960	March	100.00
Connecticut Pr. Co. First & General Mtge., Series B	2,000,000	3¾	1967	March	101.00
Dayton Power & Light Co. First & Ref. Mtge.	1,500,000	3¼	1962	Feb.	.....
Minneapolis Gas Light Co. First Mtge.	200,000	4	1950	*	103.50
Total	$19,178,000				

*See footnote 1.

TABLE II. SUMMARY AND ANALYSIS OF LONG-TERM DEBT ISSUES OFFERED PUBLICLY, FIRST QUARTER, 1937

Company and Issue	Coupon Rate	Principal Amount	Maturity Date	Month of Offering	Offering Price*	Offering Yield	Underwriters' Commissions*	Proceeds to Company*	Estimated Incidental Expenses*	Net Proceeds*	Cost to Company†
(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)
	%				%	%	%	%	%	%	%
Philadelphia Electric Co.											
First & Ref. Mortgage	3½	$130,000,000	3- 1-67	Mar.	102.50	3.37	2	100.50	0.55	99.95	3.50
Northern States Power Co.											
First & Ref. Mortgage	3½	75,000,000	2- 1-67	Feb.	101	3.44	2	99	0.53‡	98.47	3.58
Pan. East. Pipe Line Co.											
First Mtge. & First Lien, Series A	4	24,000,000	3- 1-52	Mar.	97.50	4.23	2	95.50	0.48	95.02	4.46
Atlantic City Electric Co.											
General Mortgage	3¼	18,000,000	1-15-64	Feb.	101	3.19	2	99	0.58	98.42	3.34
Dallas Power & Light Co.											
First Mortgage	3½	16,000,000	2- 1-67	Feb.	102.75	3.35	2	100.75	0.74	100.01	3.50
Brooklyn-Manhattan Trans. Corp.											
Rapid Transit Coll. Trust	4½	4,500,000	5- 1-66	Jan.	103.50	4.29	2	101.50	1.05	100.45	4.47
Pennsylvania Water Co.											
First Mortgage, Series A	3½	2,238,000	2- 1-67	Feb.	102	3.39	2	100.00	2.02	97.98	3.61
San Jose Water Works											
First Mortgage, Series A	3¾	2,051,000	12- 1-61	Jan.	103	3.57	2⅔	100.33	1.66	98.68	3.83
New Mexico Gas Co.											
First Mortgage, Series A	5	1,500,000	5-15-51	Feb.	99	5.10	5	94.00	------	------	------
Minneapolis Gas Light Co.											
First Mortgage	4	300,000	1- 1-50	Jan.	105	3.52	2	103.00	0.60‡	102.40	3.77
Mountain State Water Co.											
First Mortgage, Series B	5	250,000	11- 1-61	Jan.	98.50	5.11	5	93.50	4.16	89.34	5.81
Mountain Utilities Corp.											
First Mortgage	5	125,000	1- 1-57	Feb.	100	5.00	------	------	------	------	------
Weighted Averages—Totals§	3.56	------	------	------	101.56	3.48	2.02	99.62	0.58	98.98	3.61

* Expressed in per cent of principal amount as shown in Column (C).

† Computed on a bond yield basis using net proceeds per Column (K).

‡ Pro rata share of total expenses on two issues offered by same prospectus.

§ Totals which represent summation of actual amounts are: Principal Amount, $273,964,000; Offering Price, $278,244,040; Underwriters' Commissions, $5,542,953; Proceeds to Company, $272,576,087; Estimated Incidental Expenses, $1,591,310; Net Proceeds, $269,574,777.

Note: On two issues incomplete data are shown. Where an item was not available it was ignored in computing the weighted averages and totals.

547,788 shares ($55,052,694) of $4.50 no-par preferred stock of Consumers Power Company offered at $100.50 per share in January; 14,000 shares ($1,428,000) of $5.10 series, $100 par value, first preferred stock of Minneapolis Gas Light Company offered at 102 in January; and 275,000 shares ($28,325,000) of $5 no-par preferred stock of Northern States Power Company offered at 103 in February. The first named two companies devoted their new preferred stock financing to the retirement of higher dividend rate series, but Northern States Power Company replaced funded debt with the proceeds of its stock financing which was effected simultaneously with the flotation of a $75,000,000 bond issue.

Index Number of Volume

The index numbers[3] of volume of public utility financing for the first quarter of 1937 are as follows:

Period*	Total Capital	New Capital	Refunding Capital
January	47.40	5.33	229.50
February	88.84	5.80	447.35
March	98.48	9.79	481.43
First quarter	78.24	6.97	385.95

*The bases for these index numbers are as follows: monthly average, 1926, equals 100 for the monthly series; quarterly average, 1926, equals 100 for the quarterly series; and the year's total for 1926 equals 100 for the annual series.

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[3] For a description of the index and back figures through 1919 see "The Volume of Public Utility Financing, 1919-1935," 11 *Journal of Land & Public Utility Economics* 352-356 (November, 1935); 12 *Ibid.* 208-210 (May, 1936); 12 *Ibid.* 320-323 (August, 1936); 12 *Ibid.* 431-433 (November, 1936); and 13 *Ibid.* 71-77 (February, 1937).

Railroads Must Negotiate with Labor

WRITING with dogmatic generalization in 1909, Dean Pound described accurately the then state of the law: "LEGISLATION forbidding employers from interfering with the membership of their employees in labor unions is invalid. All courts have reached this conclusion."[1] The Railway Clerks case modified this traditional doctrine negatively by forcing reinstatement of employees discharged by the railroad for union activities and by prohibiting the company-formed union.[2] Now, by unanimous decision handed down March 29, 1937, the Supreme Court of the United States, in interpreting a series of legislative enactments culminating in the Railway Labor Act of 1926 as amended in 1934,[3] has broadened in all probability the concepts of interstate commerce and due process by putting positive sanctions upon the railroads to deal with labor bargaining collectively.[4]

The respondents, System Federation No. 40, a labor organization affiliated with the A. F. of L. and representing employees of six shop crafts of the petitioner, an interstate rail carrier, brought the original suit in the United States District Court for Eastern Virginia to compel petitioner to recognize and treat with the respondent Federation as the duly accredited representative of the mechanical department employees of petitioner railroad and to restrain the railroad from interfering with its employees' selection of representatives.

The District Court, after making findings of fact that the Federation had been certified as representative of the railroad's employees by the National Mediation Board, directed the railroad to "treat with" the Federation and exert every reasonable effort to keep agreements concerning pay, rules and working conditions, and to settle all disputes. It restrained the railroad from contracting except with the Federation, from interfering with its employees' free choice of representatives, and from organizing any union for the purpose of interfering with the Federation.[5]

On appeal to the Fourth Circuit Court of Appeals, the decree of the District Court was affirmed.[6]

The Supreme Court of the United States granted *certiorari* to review the cause as of public importance.

In considering the obligation imposed by the Act to "treat with" respondent Federation "and exert every reasonable effort to make and maintain agreements concerning rates of pay, rules and working conditions, and to settle all disputes arising out of the application" thereof, the Supreme Court reviewed the history of the legislation leading up to the more specific requirements in the 1934 amendment to the Railway Labor Act of 1926. By this amendment the National Mediation Board was required to certify the organization authorized to represent the railroad employees in any dispute. The lack of any necessity of complying with the decisions of the Railroad Labor Board, as provided for in the Transportation Act of 1920, with the subsequent imposition of legal obligations in the Railway Labor Act of 1926 as amended was considered by the Supreme Court in upholding the decree of the District Court.[7] Mr. Justice Stone reasoned that the command to the carrier to treat with certified representatives of labor added nothing to the 1926 Act unless preliminary negotiations for the settlement of disputes on the part of the employer were required. The Supreme Court further held the decree was warranted by the statute in so far as it involved a nega-

[1] Pound, "Liberty of Contract," 18 *Yale Law Journal* 454, 481 (1909).

[2] *Texas & N.O. R.R. v. Brotherhood of Railway and Steamship Clerks*, 50 Sup. Ct. 427 (1930).

[3] See Traylor, "Recent Railroad Legislation and Developments," 29 *Illinois Law Review* 506, 508 (1934) and "Railroad Labor Legislation of 1934," *Ibid.* 789 (1935) for the legislative background of the instant decision.

[4] *Virginian Rwy. Co. v. System Federation No. 40 et al, United States Law Week*, Vol. 4, No. 31, 1st ed. (3-30-37) Index 875.

[5] 11 F. Supp. 621 (1935), noted in 2 *University of Pittsburgh Law Review* 119 (1936).

[6] 84 F. (2d) 641 (1936), noted in 85 *University of Pennsylvania Law Review* 224 (1936).

[7] Section 9 of the Railway Labor Act of 1926 provided means for enforcing arbitration awards. Section 10 prohibited changes in conditions for 30 days, in certain circumstances. Section 2 recognized the right to select labor representatives without interference.

The 1934 amendment made more explicit the prohibition against such interference and also imposed other specific obligations which went beyond the moral force of public opinion.

tive duty not to treat with other representatives of the carrier's employees. This was not to limit, however, the carrier's right to make individual contracts with its employees.[8]

The second major contention of petitioner was that the attempted regulation, especially in its application to backshop employees, was not a regulation of interstate commerce authorized by the commerce clause. The Supreme Court noted that the occurrence of labor disputes constituted an obstacle to the uninterrupted flow of commerce and that the means Congress had chosen to secure such an uninterrupted commerce were appropriate to the end and within its congressional power.

More specifically, the backshop employees, numbering 322 at Princeton, West Virginia among the 824 eligible to vote, when not making repairs on locomotives and cars withdrawn from service for long periods of time (97% of which were used in interstate commerce), manufactured rivets and repaired parts to be placed in railroad stores for use on the line. All such activities taken together were considered related to interstate commerce so that if a strike occurred, apart from spreading to operating departments, the effect on commerce would not be negligible. Such a relation was deemed to exist despite petitioner's contention that such backshops could be closed and the repair work turned over to independent contractors. The Employers' Liability Cases (207 U. S. 463, 498), holding a failure to compensate injured workers bore no direct relation to interstate commerce, were distinguished as a different type of regulation. A failure to settle grievances of railroad employees did affect commerce directly.

The third major contention of the railroad was that compelling the railroad to negotiate with the Federation was not due process of law. The Supreme Court held that wherever interstate commerce was involved there was no violation of the Fifth Amendment so long as the restraints on petitioner's liberty to contract were not unreasonable. Where the legislative means are appropriate to a permissible end, the due process guarantee is not one of untrammeled freedom of action and contract. The carrier was not precluded from entering into any contract with its employees individually; nor was it prohibited from entering into any employment contracts if it chose so to do.

The Norris-LaGuardia Act of 1932 was invoked by petitioner because the injunction against the petitioner from treating with other than the representatives chosen by its employees had a blanket effect. The court held the purpose of the Norris-LaGuardia Act was not to preclude mandatory injunctions but to forbid blanket injunctions in labor disputes. The specific provisions of the Railway Labor Act as amended overruled the earlier and more general provisions of the Norris-LaGuardia Act.

The objection that a majority of those eligible to vote did not so vote but that only a majority of those participating in the elections voted for the employees' representative, while of merit, was held not required by the act or by the authorities. Those not participating were deemed to have assented.

It is too early to assess the significance of the Virginian Railway case. However, despite the indifferent manner in which the railroad fraternity received the decision, the query necessarily arises whether the shoe of coercion has not now been fitted upon railroad employers. If the conditions of bargaining may be fixed so that the duly accredited representative of the railroad's employees cannot be ignored, what in effect may there be left of freedom of bargaining? If all the decision means is that in order to facilitate amicable settlement of disputes the carrier may negotiate perfunctorily, then the decision is no advance over the Railway Clerks case. Coercive mediation has been the law for some time.

If, however, positive duties have been imposed upon the carrier, then the concepts of interstate commerce and due process have been broadened. Such an affirmative duty may mean any one of several things. Appointments to negotiate with labor's representative must be made and

[8] Petitioner further contended that the decree, if so interpreted, would not be a proper subject of a decree in equity and would be beyond the power of an equity court since equity has no power to compel the parties to agree. The Supreme Court answered this contention by saying such relief rested within the sound discretion of the court and that equity courts would go further in promoting a public interest like that incorporated in the Act than they would go in settling private disputes.

those appointments must be kept. The duty may encompass only a willingness to confer and exchange views. On the other hand, there may be a duty to embody labor's proposals, if acceptable, in an agreement binding for a period of time. Or the duty may involve matching proposals with counter proposals. It is readily seen that control of the conditions of bargaining may very well converge into control over the substantive matter of agreement. Any distinction between freedom *to* contract and freedom *of* contract is likely to be difficult, if not impossible. Perhaps, a duty to confer, with reasonable effort to get together, may present a workable solution. In any event, the necessary result of the Virginian Railway case is to impose a penalty by the courts where there is no statutory penalty.

The decision, because of the basis for putting positive duties on the carriers to treat with its backshop employees, has some general significance. Relations once considered too remote to affect interstate commerce now are considered directly involved. The necessary result is a putting of the carriers more at the mercy of Congress. Although constitutional limitations on Congress are still present in form, considered realistically, the Constitution affords the carrier little redress. In letting economic considerations influence the physical concept of commerce, the Supreme Court is one step closer to blending its new economics into political considerations. Whether the confidence of railroad labor in the courts will be increased remains to be seen. Resort to the courts may be more in the interests of the public than a strike or lockout which disrupts the business community.[9] The decision has all the potentialities of laying the judicial basis for federal legislation to outlaw sit-down strikes so far as railroad employees are concerned. The legislation, however, is one-sided in so far as effective control is limited to the carrier. No effective means of compelling labor to live up to its agreements appears imminent.

The tendency to scrap due process as a substantive concept which has been built up since the Civil War and to swing to due process as a procedural concept is also quite apparent in the reasoning of Mr. Justice Stone.

While the decision in the Wagner Act case received more publicity than the instant Virginian Railway case, everything that was sought in the Jones-Laughlin case was upheld in the Virginian Railway case, except that the latter is limited to railroad employees. The stage now appears to be set for the Federal Government to exercise a greater control over manufacturing and laboring disputes.

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[9] Albertsworth, Note in 25 *Illinois Law Review* 310 (1930).

Book Review Department

Urban Land

Gage, Daniel D. LAND TITLE ASSURING AGENCIES. *San Francisco: Recorder Printing and Publishing Company, 1937. pp. 162. $2.00.*

This book is unique in treating the methods and problems of land title assurance with an economic rather than a legal emphasis. It presents for the first time a comparative analysis of each of the current methods of facilitating the marketability of title. The treatment of the private title insurance business is particularly complete, and is based on facts obtained from a widely circulated questionnaire. In general, the material is lucidly presented and well documented. A good bibliography is included.

The first chapters consider the characteristics of land tenure and the economic features of land which hamper the marketability of title and give rise to the need for title assurance. There follows an analysis of the various methods in vogue for assuring title, beginning with a critique of the American recording system and the rudimentary methods employed by the conveyancer and abstracter. The widespread abstract-opinion system is described, and its costs and limitations are considered. The operations of the public abstract office, and the use of the private certificate of title are discussed.

Seven chapters are devoted to a rather comprehensive treatment of title insurance. The historical development of the device and the title insurance business is traced. The methods of insurance, the policies employed, and the problems of regulation are capably treated. Data on premiums and the financial experience of title companies are presented for the first time. Finally, state title insurance is treated.

Dr. Gage concludes that the complexity of land title arises from the complexity of the social order and that, accordingly, the problems of land transfer cannot be legislated to solution by simplifying the rules. He characterizes the business of title assurance as a natural monopoly because of the difficulty of creating multiple title plants and the high proportion of fixed to variable costs in operation. All nations save the United States and Great Britain have established the mechanics of land transfer as a governmental function. In this country only half-way measures have been taken with the result that the functions are divided between private and public agencies. It is his opinion that of the methods in use, title insurance is most effective. Government assurance is likely to be more cumbersome and "its assurances less readily acceptable."

Three possible solutions to the problem of title assurance in America are presented. The first, universal state registration of title, is a worthy scheme but impractical of application. The second, state title insurance, would create a duplicate service unless existing plants were purchased, a procedure which might be difficult. Furthermore, public operation will be less efficient and less dependable.

The solution which Dr. Gage considers to be most acceptable comprehends the perpetuation of the present device of private title insurance, but involves the imposition of greater public control. Since title insurance is a natural monopoly, he proposes that one company be enfranchised in each county, with state regulation by commission.

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Public Utilities

Wilson, G. Lloyd, Herring, J. M., Eutsler, R. B. PUBLIC UTILITY INDUSTRIES. *New York: McGraw-Hill Book Company, Inc., 1936. pp. xv, 412. $3.50.*

This book presents descriptive and factual data necessary to an understanding of the nature and characteristics of public utilities in the gas, electric, water-supply, transportation, and communication industries. The authors have purposely excluded railroad, water, and air transportation utilities believing, as they say in the Preface, that these industries are adequately covered in other texts.

The first of the 15 chapters discusses the characteristics of public utilities; whether or not a given industry is a public utility is a mixed question of law, economics, and

sociology, and the answer must be found in legislative acts and court interpretations. The second chapter deals with the principles of rate-making, and defines a theoretically correct rate structure as being "one which provides an adequate return to the utility and which assesses the costs of doing business among the customers in proportion to their responsibility for them." The demand and cost factors involved in rate-making, and particularly the load-factor concept, are adequately described.

The succeeding 12 chapters discuss the economic features, organization, functions, services, rate structures, and policies of the manufactured and natural gas industries, electric light and power industries, water-supply industries, motor transportation industries, urban street car, rapid transit and interurban electric railway industries, pipe-line transportation industries, and telephone, telegraph, cable, and radio communication industries.

Five chapters deal with transportation industries. The authors hold that the taxicab business is in its very nature a public utility and, as common carriers for hire, they should be regulated. Urban rapid transit is classified as the transportation of passengers in metropolitan areas by public carriers operated over roadbeds above or below street levels at an average speed of 20 to 25 miles per hour. The decline in interurban electric railway transportation is attributed to such factors as overexpansion, financial exploitation, obsolescence of equipment, and the competition of other agencies, especially motor transportation. One chapter is devoted to pipe-line transportation industries.

Chapters on the telephone, telegraph, cable, and radio include the consideration of international or world-wide connections with the communication industries in the United States. Progress in the telegraph and cable industries, say the authors, has been materially slower than in most other utilities, and the two have suffered more from the depression. Radio broadcasting, differentiated from radio communication service, is legally not a public utility.

A chapter on the nature and significance of the trends toward consolidation and combination of utilities in vertical and horizontal patterns closes the book.

The presentation of the descriptive and factual data is clear, accurate, and elementary. The authors have not championed any side or view on controversial subjects. References to sources are numerous and are of a nature which adds to the value of the book.

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Electrification Committee.

MAP OF ELECTRIC TRANSMISSION AND DISTRIBUTION LINES IN ILLINOIS. *Springfield, Illinois: State Rural Electrification Committee, 1937. 30" x 50", scale 8 miles to the inch, lithographed. $1.*

The State Rural Electrification Committee of Illinois has just published a map of the electricity supply in the State as a part of its survey of the facilities available for rural electric service.

Lithographed in colors the basic transmission network has been printed in red and the lower voltage lines (13,200 volts and under) suitable for rural and other distribution service in blue. Company ownership and voltage are indicated for each line. With the exception of retail distribution lines inside corporate limits the map includes all electric lines in the State. This means municipal plants and REA projects and other publicly owned lines as well as those of public utility companies. All generating stations are shown, including industrial plants which dispose of a part of their output to public utilities for resale to the public. Points of interconnection both within the state and at the state line are also indicated.

The legend is modelled after the conventional symbols currently used by the Federal Government. This map supplements rather than duplicates the Federal Power Commission's Power Survey maps of the United States by providing a detailed record of the facilities for one state.

New editions are planned at frequent intervals. Arrangements are being made for the Illinois Commerce Commission to take over the map as a part of its basic procedures in granting certificates for new line construction. It is hoped that this unusually correct first edition, revised and brought down to date, will become a permanent part of the records of the electric industry in Illinois.

HELEN C. MONCHOW
Of the Journal Staff.